



Wednesday, January 12, 1927

## BUSINESS MEN AND ARCHITECTS

A FEW years ago, when the country was reported to be rushing dogwards with more than usual speed, a sudden reaction set in against the politician in favour of the business man, and it was to him, all hard-headed and practical as he was thought to be, that the country turned in its tribulation. But the passage of years has shown us that he, too, like the rest of us, is fallible, despite his maxims of efficiency and his "no nonsense"; and he, too, is sometimes unable to distinguish between the shoddy and the well-made, between the meretricious and sound article; he, too, sometimes fails to realize that low price is not synonymous with cheapness; he, too, is sometimes deceived by appearances. And we have evidence of all this in his occasional attitude towards building. "How is it," asks one of his number, "that the builder" (meaning thereby the speculative builder) "builds houses that sell more readily than those built by the architect?" The comparison is an unjust one, for the architect and the builder do not compete any more than do, say, the bespoke tailor and the manufacturer of ready-made suits. Nevertheless, the implication is there; it is that the speculative builder succeeds and the architect fails because the former provides houses that people want and the latter is unable to do so. Thousands of ready-made suits are sold for every bespoke suit, but is the bespoke tailor, therefore, less successful? No; the bespoke tailor works for those who can appreciate elegance, who like fit, and who desire a degree of permanence. The same may be said of the architect. He builds for those who can appreciate design and form, who desire a house that has been conceived in relation to its position, and perhaps in relation to the particular requirements of its purchaser, and which has a degree of permanence and stability due to the proper use of sound materials and to good workmanship, and those are qualities which appeal to the few rather than to the many.

In a house there is much that is hidden from the eye; far more, indeed, is hidden than is revealed; yet, from the point of view of permanence, far more important are the hidden parts than the parts exposed. It is no difficult matter, therefore, to build a house, with insufficient foundations, with bricks liable to disintegration, with carpentry of undersized scantlings, with joinery of unseasoned wood, with weak mortar, with too few coats of paint, with underweight lead, and countless other defects, all of which make for cheapness, and all of which are unseen or unnoticed by the prospective purchaser. The comparison between

this house and that, therefore, may be extremely misleading, and yet it would appear to be one that is made quite superficially by many a business man. And a remark, such as the one which we have quoted, shows that he is unable to exercise the same discretion with regard to houses as to clothes. Put before him a well-tailored suit, of good cloth, good cut, well-lined, well-sewn, and one of harsh shoddy, misshapen, cotton-lined, machine-sewn, the latter costing a third less than the former; would he turn to the maker of the first suit and upbraid him for not meeting the demand of the public by making the cheaper and inferior article, the article without distinction, without fit, without lasting qualities?

And this inability to realize that the cheaper article is not always comparable with the more expensive, often leads to unfairness in matters connected with building which acts to the detriment of good workmanship. A householder asks two firms to estimate for "doing up" his house, the "doing up" consisting of a few minor structural repairs and some decoration. No specification is supplied, with the result that the firms tender on entirely different bases. The one is actuated by a refusal to do bad work, the other by a determination to get the job. The two tenders come in—£182 10s. and £139 15s.; a difference of £42 15s. Without hesitation, without comparing what each proposes to give for the money, the "doing up" is given to the lower tenderer. It may be that the householder is of a nomadic disposition, and that before the defects of the bad work have declared themselves he has sold the house. If so, perhaps from his own point of view he chose wisely. On the other hand, it may be that in a comparatively short time he is called upon to pay the difference of £42 15s. and more in continually making good and patching up the initial bad workmanship.

Again, a householder wants a central heating installation put in his house. He asks two local firms for estimates. They arrive with a difference in their price of perhaps 20 per cent. And why? Because the one is supplying a boiler of greater capacity and radiators of greater superficial area than the other. The householder gives the work to the lower estimator without it so much as occurring to him that the two firms are supplying entirely different plants; a difference which he would realize at once were he buying a motor-car instead of installing central heating.

No; business men are not infallible, and architects have their uses.

## NEWS AND TOPICS

REGISTRATION IN OUR TIME—PRESERVING RURAL OXFORD  
—THE REAL SKYSCRAPER—ARCHITECTURE AND ACOUSTICS  
—THE GHAZI'S MONUMENT—THE LATE SIR FRANCIS FOX  
AND ST. PAUL'S—A GHOST STORY FOR MR. POWYS.

MEMBERS of Parliament are discovering this month the existence of architects as a professional class with considerable social influence in the constituencies. The decision of the R.I.B.A. to ask M.P.'s to ballot next month for the opportunity to bring in the Registration Bill is already arousing interest among political correspondents. The allied societies are wisely inviting their Parliamentary representatives to meet them and discuss the aims of this measure and its advantages to the community. Although much water will probably pass under the preserved Waterloo Bridge before the Bill becomes law, all this preliminary spadework is invaluable to the profession.

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The University of Oxford cannot be absolved from the responsibility for the vagaries of the City Council. If only more members of the university had taken an interest in public affairs the proposals to cut down some of the finest trees in Oxfordshire and to build on South Parks would probably have been resisted from the first. As it is, the proceedings of the Council last Monday show a surprising desire to prevent the preservation of rural Oxford. The well-known views of the advisory panel of architects, Mr. Edward Warren, Mr. F. M. Elgood, and Mr. H. S. Rogers, count for little with a certain type of local councillor, who is ready to devote time to public service, but has little appreciation of wider or more æsthetic issues than that of a penny off the rates.

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A picture of a new and fearful skyscraper to rise to a height of 110 stories, or 1,208 ft., has been cunningly composed with the other so-called skyscrapers of New York serving as background. The statement that it "is to be erected in New York by the Larkin Brothers" seems to indicate approval for the scheme, and there is no doubt that its audacity is calculated to appeal to the grandiose instincts that American air seems to stimulate. It would overtop the 300 metres-high Eiffel Tower, but in spite of its greater height it would not bear comparison with the noble monument of the great Frenchman, since it would not have the fine, strong, curving line, nor the appropriate scale of parts. The many equal windows of the proposed skyscraper give to it an air of dull monotony that its equal heights of tower and spire do nothing to dispel. As a structural feat, a tower of this magnitude would present some interesting problems in connection with foundations and wind pressures, but Eiffel has already taken the bloom off the fine fruit of adventure in this respect. If it actually becomes an established fact it is to be hoped that the New Yorkers will think that one is quite enough.

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Apropos of my notes last week upon architects and acoustics, a correspondent writes: The question whether

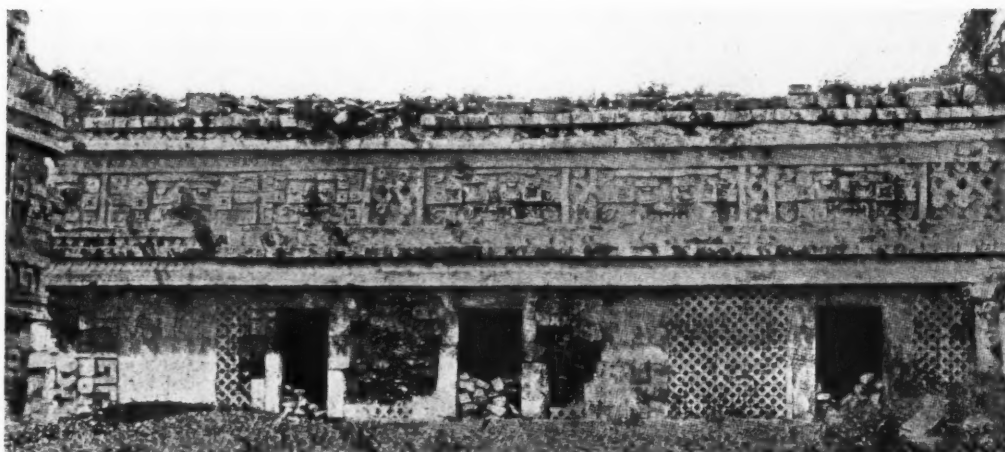
architecture is made for acoustics, or acoustics for architecture, may never be quite satisfactorily answered, but there is no doubt that some fine interiors gain immensely from their suitability for setting off fine music. Durham Cathedral, with its massive effects of curving shadow and dark woodwork, flecked with an occasional golden gleam of light, never seems so completely right as when the full, deep notes of the choir are pierced for an instant by the shrill falsetto of the soloist. Architecture and music were inextricably associated, too, in Wordsworth's immortal impression of King's College Chapel. But one must suffer to be beautiful. The perfect harmony means laborious tuning on off days when the chapel is closed to visitors, and I who stayed to measure in the chapel on one such occasion can tell the following story: Organist and assistant were putting the organ through its paces with the assistant at the keyboard and the organist standing somewhere out of sight listening to the quality of the notes, as they were struck separately to his word of command, now A, now C, and so on. The noise was deafening, and the "self-poised" roof trembled through its "ten thousand cells." The commands grew more and more impatient. Presently, in mistake for a demanded "D" came a more tremendous thundering that shook the building, but across the din came the organist's voice tremulous with rage, pain, and the effort to make himself heard: "I said D! I said D!! I said D!!!"

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People so often ask, in a superior tone of voice, what Muhammad ever did for the good of mankind that it is, perhaps, permissible to instance the admirable styles of architecture that have grown up under the influence of his restraining edict against graven images. Bronze gentlemen in modern costume are not altogether in harmony even with European architecture, and fail somehow to carry on the sculptural tradition which excuses the repetition of detail borrowed from the sunny land of Greece. In an Oriental city, such statues look more than ever out of the picture, and the monument to the Ghazi Mustapha Kemal Pasha, designed by the Italian Professor Canonica, will mark another stage in the return of Constantinople to European ways. Even the prospect that its architectural setting is to be formed in "rose and green granites" is hardly sufficiently rosy to compensate for the fundamental discord of the naturalistic figures, but perhaps the professor will take a leaf out of Epstein's book and avoid the breach of the commandment by making the figures conform to the rules of geometrical decoration!

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An appreciation of the late Sir Francis Fox which appeared in the *Morning Post* for January 8 mentions how Sir Francis examined certain important aspects of St. Paul's Cathedral, including the waterlogged foundation and the rubble core of the piers and issued a report containing a warning that important works would be necessary if the cathedral was to be saved. "His report being considered alarmist, was not acted upon, so he resigned." We have, therefore, a whole history of resignations. Mr. Somers Clarke issued a warning of serious danger—and resigned. Sir Francis Fox could not obtain a hearing—and resigned. Mr. John Todd served the Dangerous Structure notice—and resigned. Mr. William Dunn, nominated by



Part of a ruin in the ancient capital of the Mayas, Chichen Itza.

the R.I.B.A. to represent them on the extended St. Paul's Committee uttered a warning that grouting of the piers would be futile and dangerous and that rebuilding would be necessary—and resigned. In face of so many sincere protests by men competent to judge, it would seem that the optimism of the cathedral authorities stands upon a very slender basis in fact.

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In this commercial age it is always refreshing to find that a newspaper has made room for a little paragraph of sound art criticism, and it is astounding how precisely the work is sometimes done. The following quotation from the *Morning Post* of January 7 leaves one in no doubt as to the medium in which the artist exercised his skill. Praising as "pleasant reading" Mr. William Power's book, *Robert Burns and Other Essays and Sketches*, the reviewer says a word for the illustrations—and how right he is! "The book is beautified by some of the author's pen and ink drawings, sincere and clear-cut little sketches in pen-and-ink." What masterly play he makes, too, with the hyphens!

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"Architects when they are given a free hand, do not make a house that sells as well as the builder's house. It isn't that the builder's house is more beautiful, so I suppose it's because architects' houses aren't so practical," said Sir Herbert Morgan in the *JOURNAL* last week. Sir Herbert Morgan probably knows nothing at all about it. The reason the speculative builder is able to sell his house is mainly one of cost. Free of the architect and the architect's specification, he often uses materials which are cheaper in quality and price, he economizes where economy should not be (his foundations go down only 18 in. instead of 2 ft. 6 in.), he usually builds on the narrowest possible frontage, and more often than not the question of aspect is altogether ignored. He sells his house on cheapness of cost and surface value alone. Rather than pay for what should be in the heart of the house to ensure its soundness, people will pay only for what they see. But his houses bloom with a beauty that has no hold on time. Hereditary consumption possesses them; only the architect knows how soon their complexions of sham half-timber work,

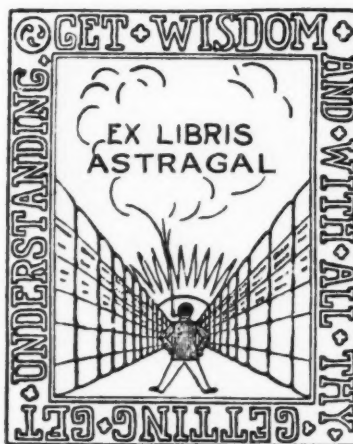
and gaudy plaster, and gimcrack ornament will descend into the wormy grave.

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Tropical undergrowth and tropical weather have worked havoc with the architectural remains of the American continent, destroying where natural conditions in Greece and Egypt have tended to preserve. Nevertheless, researches during the last few years have brought out the fact that American archæology, especially where it touches on the history of the lost race of Mayas in Yucatan, is worthy of comparison with much that older lands have to offer. The Mayas flourished about the time of the Norman conquest in England, but the architectural histories have no accounts of their temples, and how the architecture of a great race can be perfected and then crumble stone from stone without any record remaining would be a fine ghost story to tell to the secretary of the Society for the Protection of Ancient Buildings on a dark night.

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I was sorry not to have my book-plate included among those illustrated in the *JOURNAL* last week. I could not get one made in time. But I have got it now, and I am sure there is no harm in my giving it here.





## SOME RECENT CHURCH DECORATIONS

[ BY GRACE E. ROGERS ]

THE object of art has been defined as the expression of spiritual values in terms of beauty, and this interpretation may be supplemented by the expressionists' creed that the end of life is to utter and communicate emotion. Definitions of art, however, are generally unconvincing owing to a lack of unanimity in the meaning of terms and forms of argument employed. In the first place, the misinterpretation of the idea of beauty has in itself effected a contradiction of value termed intellectual or ethical from those called sensuous or emotional. Spiritual significance, in this way is attached to the mere emphasis of religious motive or some traditional form of ecclesiastical symbology, and the sensuous element regarded as actually deterrent to any ultimate spiritual idea. All this we may ascribe to a false theory of art, which in its early form was expressed in primitive theology, and, as such, symbolized the emotional gesture of mankind to the forces governing and controlling his destiny.

Ritual, therefore, was the representation of collective needs and social emotions and the means of transmutation or enforcing of desires to active realization. Pressed into the service of religion was the best of man's ability. As a poet he eulogized his deity as a painter or a craftsman utilized the materials of his craft as adequate vehicles for expression. The monks chanted their paternosters while the crucibles were heating; for it was enjoined, as a sacred duty, that the eyes of "Our Lady" were painted with the finest ultramarine, the fringe of her robe tinted with the purest gold. Likewise, St. Sophia, planned as a veritable Solomon's temple, was thus expressive of more than human handiwork, an embodiment of human ideals—a temple of a "living God."

Modern conditions, however, have changed the basic values of life. Profits are reckoned by mercenary rather than spiritual measures, while machine-made goods and commercially-fashioned products displace the craftsman's work of old for all our needs. We frequently search in vain for that element of beauty which is the natural outcome of every work of sincerity, achieved with full recognition of the purpose inspiring its need.

It is, therefore, worth while to note the re-awakening interest in, and appreciation of, the value of art which has led to the decoration of many of our churches by artists. Such has inspired the recent innovations at Brompton Oratory, where not only a free and

human spirit of religious service prevails, but the recognition of the larger social functions of the church itself and its power as a public building, accessible to the general community, to exercise a mental impulse toward the appreciation of beauty and order, and stimulate and intensify emotional expression.

With all the conflicting sources of interest and diversion, and the lack of harmony that is actually expressed in modern life, one of the greatest needs is the discovery of potent sources for the refreshment of our vitality. Beauty, however conceived, has been analysed as the accomplishment of a formal unity which in its particular instance is the expression of a universal form of existence which every activity is striving to accomplish: the ideal harmony of form and content which is absolute. This æsthetic definition is significant of a biological and spiritual truth, which the value of every work of art has in its power to convey; by measure of which is effected our transmutation to the emotional participation in the process of creation. What, indeed, are our arts and customs but indexes of our life! A fine environment is not alone a question of pattern, form, and colour, but as an essential outcome of efficiency contributes to our sense of security, confidence, and well-being, and has thus a psychological and physical intention, subconsciously felt if not consciously recognized.

We read that the congregation of Oratorians was organized in 1575 under the instigation of a Florentine priest named Philip Neri, the purpose of which was the promotion of vernacular exercises, unmonastic and unmedieval, in which a cheerful rather than an austere and melancholy temper is encouraged, and "by the comfort of music exercised to a contemplation of celestial things." It is not surprising to find this order among the more advanced to realize the importance of superseding the standardized products of church furnishings by encouragement of the direct co-operation of the artist himself. The Baroque style of the Oratory is likewise in key with the spirit of the founder, a style originally adopted to meet the growing desire to express a more redundant *joie de vivre*. If an analogy can be drawn it is with those oratorical principles which govern the individual life not so largely by an



*The attempted murder of St. Philip. A banner in the Brompton Oratory. By Laurence Bradshaw.*





*Banners in the Brompton Oratory illustrating episodes in the life of St. Philip. By Laurence Bradshaw. Left, the Miracle of Our Lady. Right, St. Philip and His School.*

arbitrary imposition of artificial restraints but harmoniously and suitably through the natural inclinations.

The banners reproduced form part of a series of ten illustrating episodes in the life of St. Philip, to be suspended on ceremonial occasions from the piers supporting the arches on either side of the nave. Mr. Laurence Bradshaw, the artist, has approached the work in frank acknowledgment of their purpose. They must be illustrative, and appeal to a wide, not a limited, public, keeping within the confines of the human aspect of life—those simple, unadulterated facts which continue to comprise the life of ordinary men and women, whatever their race, their creed, their environment. The series is keyed in harmonious relations and provides a pleasing sense of warmth and intimacy without garishness. A varying note is introduced in each banner in colour and design built around a harmony of blues, greens, reds, and gold, and affords a striking contrast with the more sombre tones of the surrounding architecture.

Mr. Laurence Bradshaw has for several years acted as assistant to Mr. Frank Brangwyn, R.A. (the world-famous mural decorator), gaining valuable experience after the manner of the old apprentices, a method we are unable to supersede, in obtaining a working and efficient knowledge of the technical essentials of decoration. The activities of the master-decorator are well known to have extended to all branches, including mural decoration, mosaic, metal work, stained glass, and furniture design, which comprise but one part of his manifold activities, as widely diverse as the Renaissance artists. In these days of specialists we are apt to under-rate human skill and suspect versatility; but the genius of the artist lies essentially in his competency to turn his capacity to any purpose which is largely dependent upon his practical training. In architectural decoration of any form this involves not only an appreciation by the artist of the nature of his materials and their adequate

interpretation and other various conditions attending his work, but the subordination of individualistic expression to adjustment with a dominating architectural motive. One of the problems of the modern age, the keynote of which is individualism, where work is accomplished by subdivision and diversity of means, is the preservation of coherence. Questions such as these have psychological as well as practical issues, and in their resolution may be found that which distinguishes between adequate art expression and otherwise—fundamentally a matter of spiritual values. Applied to problems relative to architecture, as a certain exponent of aesthetics said, it lies in the capacity to live again the original architectural emotion. By such means any embellishment subsequently introduced becomes part of an organic unity rather than the mere imposition of a discordant or foreign element. This faculty characterizes all decorative work of the best periods of art and architecture in our Christian era—such as the Byzantine, Gothic, and Renaissance, and cannot be too strongly encouraged by the employment of the best ability available. Mr. Laurence Bradshaw is also engaged in executing a series of bas-reliefs likewise illustrating episodes in the life of the Saint, which are conceived with a degree of freshness and religious intensity astonishing in this prosaic age. These combine a thorough knowledge and appreciation of architectural style and a decorative sense of composition showing a sound understanding of the requisite finish for the attainment of the finest effects in their ultimate position and environment. British mural decorators with the necessary technical knowledge are, unfortunately, all too few, and the Oratory are very happy in their judgment and patronage given to British art rather than in following the customary fashion of procuring modern reproductions of Italian stereotyped and traditional forms.

## THE INFINITE SANDS: I

[BY CHARLES HARRIS WHITAKER]

By travelling for three days and three nights incessantly, or, at least, with no more respite than is occasioned by changing trains and stations in New Orleans, one may go from Northern Florida to Southern California, say from Jacksonville to Los Angeles. If from Miami or Palm Beach on the East Coast of Florida, or from Tampa or St. Petersburg on the West Coast, with San Francisco as the final objective, add one more day and one more night. These clocked and calendared divisions of times have some considerable significance, quite aside from the part they play in railway schedules or in proclaiming the number of hours required for what is to most people, one fears, a tedious and monotonous journey. They indicate the vastness of the expanse that the distant reader must conjure up when he comes across the phrase, "American Architecture." Indeed, the complete picture is not yet. There are two days and nights between Boston and Miami, and another day and night between San Francisco and Seattle, the northernmost city in Washington State, and but a few hours from Vancouver in British Columbia. The direct journey can be made in shorter time, of course, over the northern route, by which one should return.

This vast expanse cannot be ignored. American architecture cannot be summed up in a statement based merely upon what is going on in New York City or Chicago or in their ample environmental areas. Such a view is a considerable one, but it is far from being a complete one. The forces that are determining American architectural design are not confined to New York City. Neither are they a common factor to the growth of the United States, although basically they do exert a powerful influence. But it is not yet possible for any prophet to arise and utter a verdict. Our wanderings and migrations have but begun anew and with fresh speed.

True it is that what seems the blight of New York City lies heavy on the other towns and cities of the great expanse I have so briefly sketched. High buildings on narrow streets are everywhere, for no reason whatever, since the pretence of land congestion and constriction that has served so well in New York City cannot possibly be involved. The narrow island of Manhattan has been cited as the *raison d'être* of the high building. This has no basis of truth whatever, and there is no basis of reason for high buildings anywhere. But New York City leads, the others ape. Our herd instinct has been heated and tempered to incredible responsiveness under the influence of the customs and manners of Megalopolis, as Mr. Mumford has so aptly styled it; add to that the anæsthetic of national advertising, the effects of the kinema, professional publicity, propaganda, and it is easy to understand why the influence of the high buildings in New York City has touched American city life more deeply than any other. Against this influence there is at present no weapon. The migratory murmurs of the motor-car alone seem possessed of power to undo the great popular illusion, and as the hard-surfaced roads lead farther and farther afield, who knows? Their influence cannot at present be evaluated. As a force for breaking up the absurd metropolitan encrustations of humans that are beginning to assume cancerous form, they exist. Here and there one at times believes that they

have achieved a result, but if one examines what looks like a definite move towards urban disintegration, one soon becomes convinced that the extraordinary boom of land prices that has followed the development of the motor-car and the concrete highway, just as it followed the building of the subways that were to take people out of the reach of congestion and high rents, has already shorn any anti-urban movement of all the benefits that might accrue to a sensible distribution of our mounting and city-swarming population.

One very great land boom is now on in Florida, and it is moving westward along the coast of the Gulf of Mexico to New Orleans (where fifteen-story buildings have been built on streets much narrower than those in New York City). The Florida boom, in its social sense, is the expression of a huge surplus wealth in the possession of people who are learning how to play for the first time.

Los Angeles, California, twenty-five hundred miles away, has just passed through such a boom, and to pass from the excitement of Florida to the comparative calm of Los Angeles one must cross the desert. The student of American architecture will do well if he traverse these infinite sands, for in their presence he will be obliged to pause for a moment, and thereby will he gain a true perspective of what is actually going on in these United States.

Florida and California are in many ways counterparts. Both have traditions that date far back in our history, and both of these traditions are Spanish. St. Augustine in Florida is one of the oldest settlements that we have. It marks the unsuccessful efforts of the Spaniards to conquer by force a land that lured them with its languor and productivity, but which they did not understand. What they left in architecture is scanty, indeed. Florida, in this sense, is a new land.

So also is California, if one reckons from the gold rush of 1849. But its history goes back much farther than that and embraces one of the gentlest and most precious traditions in American history. Here was the same lure that the Spanish warrior had sensed in Florida, but the conquest fortunately fell to the lot of the Franciscan missionaries. Many of the charming mission buildings now remain, and while their influence upon Californian architecture has been greater than the influence of the Spanish remnants in Florida, California may still be said to be, architecturally, a new land. It is, of course, in the making. The result is not yet determined. Migration is fast and furious, and the deadly pall of land speculation hangs heavy over community growth. Still, in both Florida and California, an effort is being made to mitigate this evil so far as it affects architecture. Certain "developments" are placed, at least temporarily, under architectural control, in one way or another. In Palos Verdes, California, for instance, this attempt at control has led to a curious situation, since the Courts have been called upon to decide what are the legal definitions of certain styles. In the will of one who owned much land it was stipulated that the buildings erected thereon should be in a "Mediterranean" or "semi-Mediterranean" style of architecture, and the executors of the will, confronted with the task of writing a definite prescription into the title-deeds of property sold under the terms of the will, took refuge in the Courts. As a result it has been decided, so it seems, that the first style will be defined as "30-degree roofs, clay tiles, light-shaded walls, terra-cotta, stone, and plaster"; the other, "60-degree roofs, dark-toned slates, shingles, and clapboards."

[To be continued]

## THE SPIRIT OF THE CENTURY

[ BY JOHN GLOAG ]

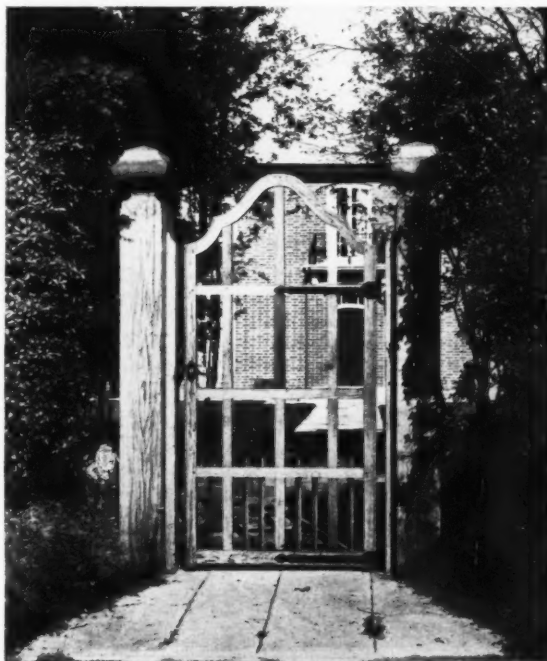
YEAR by year, amid the mass of undistinguished work that is inflicted upon cities, suburbs, and the countryside, may be found the pleasant fruits derived from the happy association of an intelligent client and an able architect. The real inspiration of the twentieth-century spirit in building is too often crushed by the smattering of architectural knowledge that prompts the interference of those empowered to commission work. In no period has the expert really enjoyed his own educated way, and no matter what craft, art, or profession is involved, with the possible exception of law and medicine, the uninstructed censorship of the man who pays the bill is inevitable. This is irritating, and, to the youthful, discouraging; but architects are better off in this respect to-day than they have been since the end of the long Georgian period. Not only do private clients who commission domestic building very often rely on the taste and judgment of the expert they have called in to solve their problem, but education has touched business groups, companies, and combines, who march behind the banner of better building, carried for so long by the banks, and contribute to the æsthetic amenities of cities and towns by allowing architects freedom from stereotyped ideas, thereby permitting glimpses of the twentieth-century spirit in building to adorn the streetside.

Of business premises built recently in London, a vigorously impressive example of contemporary taste is provided by the publishing offices of the Illustrated London News and Sketch Limited, at 16 Essex Street, Strand, W.C.2, the work of Messrs. W. and E. Hunt, with whose ideas this article is particularly concerned, as they are agreeably expressive of the twentieth-century spirit. This office building is long and narrow, running back from the Essex Street frontage to Milford Lane, the central part being lit by an area that cuts into the width. The Essex Street elevation, illustrated on page 110, shows a pleasant broadness of view concerning materials. Fitness is first considered, and then decoration of a singularly becoming order is incorporated. The ground floor is faced with Portland stone, and above the first floor level red brick-work, of 2 in. hand-made bricks, flanks a treatment of coloured faience which frames the windows of the first, second, and third floors, and forms the balustrading that screens the windows of the top floor,

which are stepped back from the line of the frontage. The general tone of the faience is grey warmed by a suggestion of green, and relieved with gold. The cable moulding that borders the whole panel of faience is of deep blue with gold fillets. For a city that endures winters of filth-laden fogs and a daily coating of dust and ashes from innumerable chimneys the introduction of coloured faience, easily washable and moderating upkeep charges for repainting (heavy items in a modern, uncivilized city), is an admirable instance of practical effect being given to the doctrine of "fitness for purpose." A street of such buildings might even force a smile to the glum face of Manchester. . .

Industrial buildings are accepted as deplorable necessities by some critics. Those who are concerned with maintaining that groups of buildings are analogous to social systems suffering under a tradition of rigid caste would conceal industrial architecture altogether, for in their view it becomes the counterpart of serfdom, and slaves are miserable things, to be used, but hidden, and, if possible, forgotten. This slightly precious belief encourages the multiplication of industrial muddles, and drives many to the view that industry must needs be portrayed as a clumsy figure, tearing up the country, blackening the town, and using corrugated iron with a distressing lavishness, saying the while: "I'm useful, I am, not ornamental!" But as a very great leader of modern industry has pointed out: "Industry and art are not incompatible, but sound judgment is necessary in preserving the true balance between them." (Henry Ford, in *To-day and To-morrow*, chap. vii.)

Industrial architecture is not incompatible with civilized decency, as many factories erected during recent years have proved. But the evasion of realities which occupied the attention of such a large number of people in the nineteenth century has left a legacy of nervousness regarding utilitarian ideas to plague an enlightened generation that is wooing common sense in the designing and making of things, particularly buildings. This nervousness manifests itself in many exasperating ways, and one of them is to regard the terms "utilitarian" and "harsh" as synonymous.

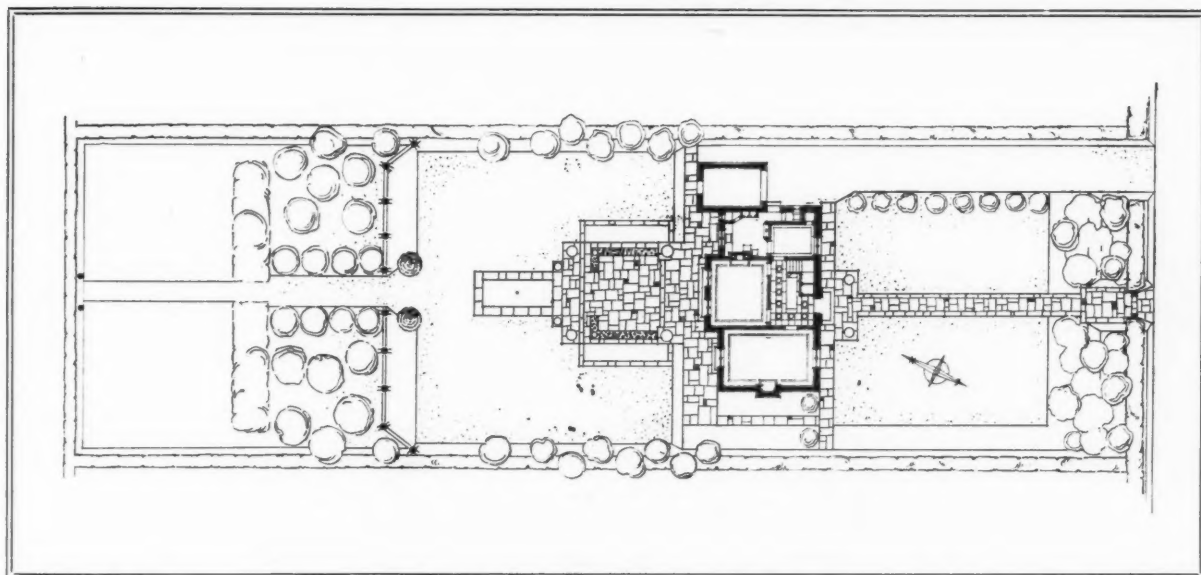


Montmead, Belmont,  
Surrey. By W. and E.  
Hunt. The entrance gate.





*Montmead, Belmont, Surrey. By W. and E. Hunt. Above, the south entrance front. Below, a detail of the entrance.*

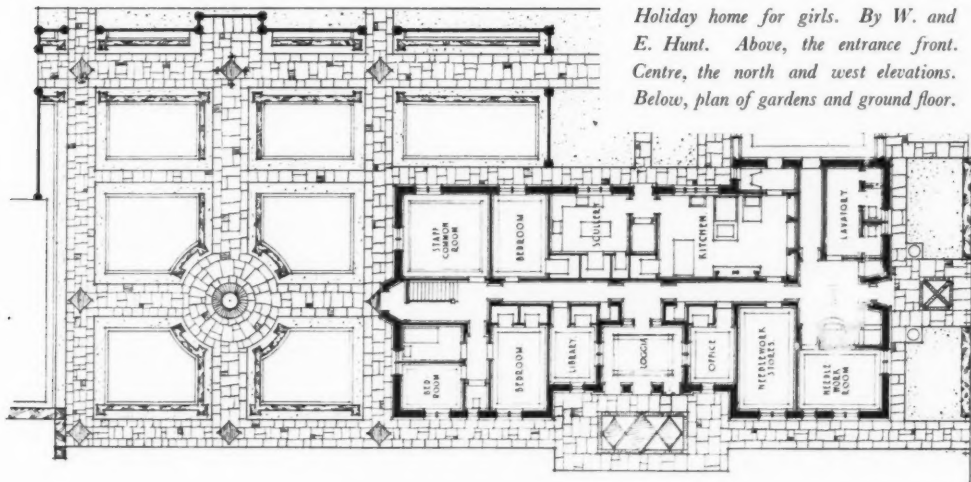
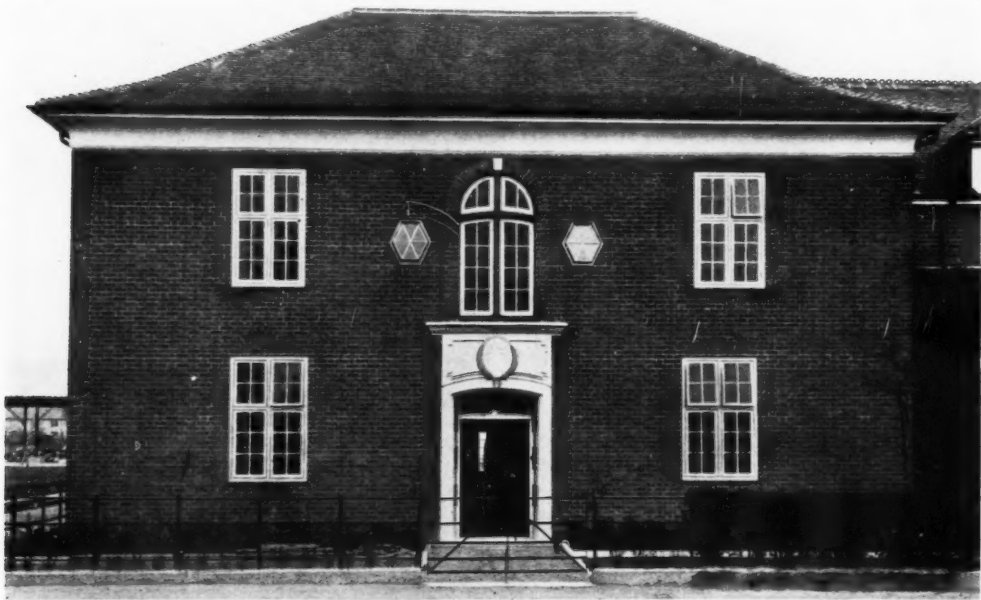


*Montmead, Belmont, Surrey. By W. and E. Hunt. Above, the garden and water pool from the dining-room window. Below, plan of garden and ground floor.*

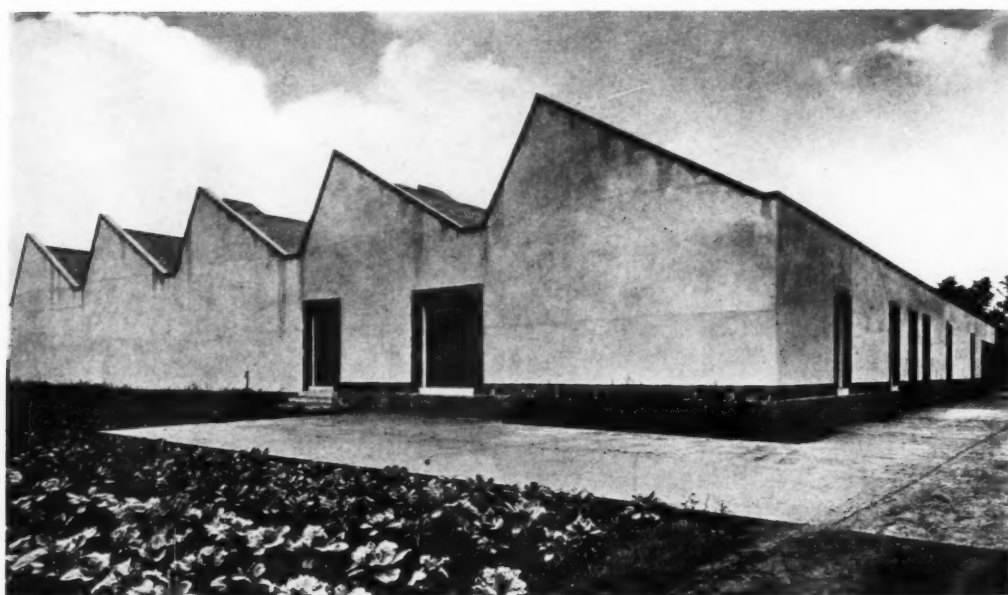


*Montmead, Belmont, Surrey.  
By W. and E. Hunt.  
Above, the drawing-room,  
showing the south window.  
Below, the entrance hall,  
showing doors to dining-  
room and maids' sitting-room.*



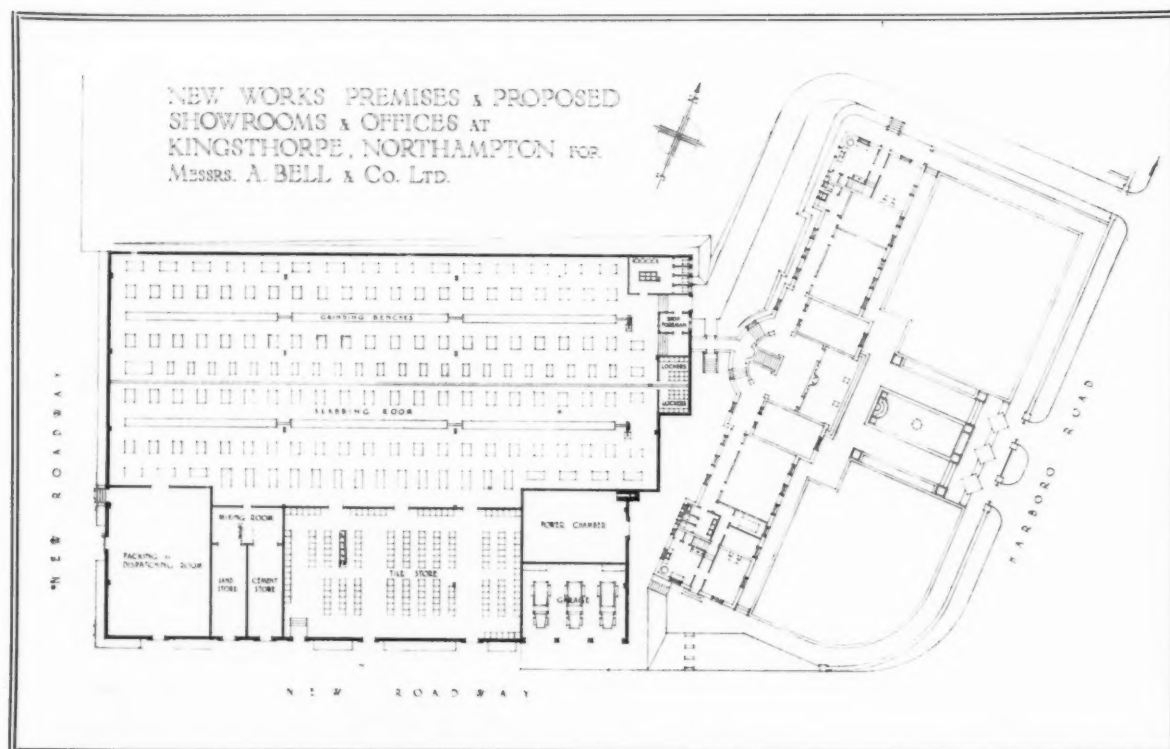


*Holiday home for girls. By W. and E. Hunt. Above, the entrance front. Centre, the north and west elevations. Below, plan of gardens and ground floor.*



Utility untrammelled by an imagined need of some disguising "style" is not lacking in beneficent effect upon the form of an industrial building. The austere dignity of the workshop premises here shown, designed for Messrs. A. Bell & Co., Ltd., at Northampton, by Messrs. W. and E. Hunt, has been derived from the essentially utilitarian character of the building. Of steel-frame construction, the outer walls are of brick covered by a stucco of rough texture formed with coarse, golden sand and Atlas White cement, giving

a rich cream colour. The base of the wall is of red brick. There are composition stone copings and roofing of green slates. Oak sliding doors increase the general air of trim efficiency. The slabbing-room, planned to approach functional perfection, has a dignified and spacious simplicity. It was designed to give as little obstruction as possible to the benches that would ultimately occupy the floor space, consequently there are only six stanchions in an area of 160 ft. by 80 ft.



*New works, showrooms, and offices at Kingsthorpe, Northampton. By W. and E. Hunt. Above, the south-west front of the works. Below, the ground-floor plan.*



A more intimate expression of the twentieth-century spirit may be found in the Holiday Home for Girls, which Messrs. Hunt have enriched with such specially pleasant

touches of imagination. One regrets the plumbing that defaces the north and west elevations, but the loggia which forms the central interest on the west deflects the eye from

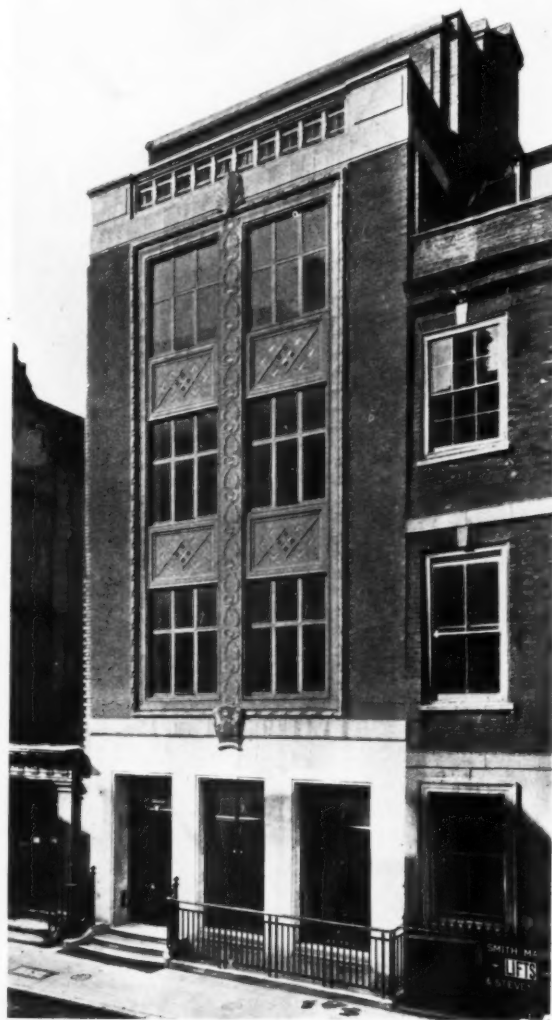


*New works, showrooms, and offices at Kingsthorpe, Northampton. By W. and E. Hunt. Above, the south elevation of the works. Below, the grinding shop.*



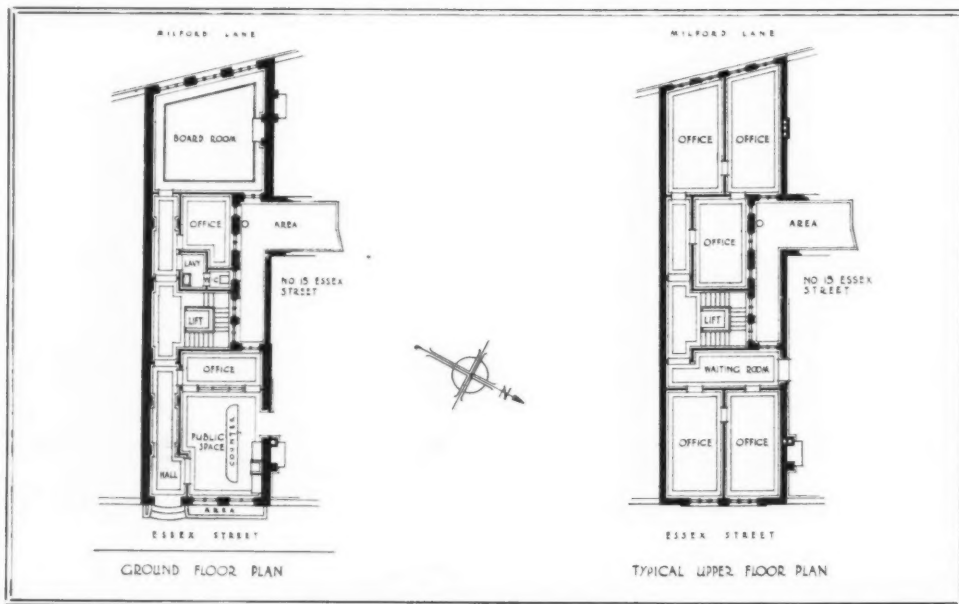
excrescences of iron and lead. The walls of hand-made red brick have an agreeable texture. There is a far-away suggestion of the Romano-British house about the arches of the loggia. The low-pitched roof of red tiles, the gutter shadow line lightened by the white-coved cornice, the windows set flush with the surface of the brickwork, give to this singularly compact building a look of well-being, an air of smiling comfort that is repeated even more effectively at Montmead, Belmont, Surrey, a house designed for Mr. Edward Hunt. Here the exterior is simpler still. Red brick walls, a roof of plain hand-made red tiles, a stone balcony projecting above the porch with a wrought-iron balustrade, windows that smile; and the house and garden have been designed together, the dining-room windows opening out on to a cool paved terrace, with a stone-framed pond piercing a lawn beyond. A screen of concrete columns and cross-pieces of larch and oak divides this lawn from the rest of the garden.

The interior of the house exemplifies the virtues of the plain background for rooms. All the walls and ceilings are painted; the hall is paved with

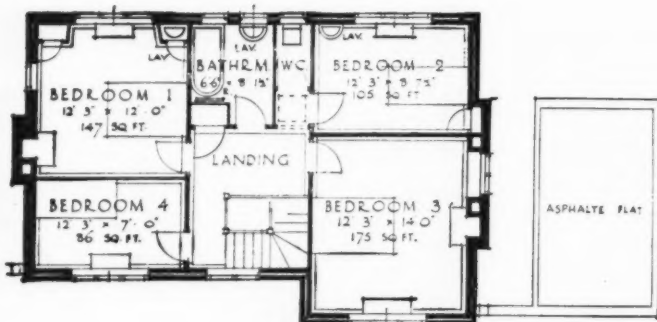


marble and a glowing panel of Spanish tapestry warms it with colour. The fireplaces are designed with marble and faience. The accommodation includes dining- and sitting-rooms, a maids' sitting-room, a kitchen, a hall with a compartment for hats and coats, three bedrooms, a study, dressing-room, wardrobe, and box-room, bathroom, linen, and other stores. A garage is attached to the house, but there is no access to it except by the door to the drive. It is a restful house, quietly distinctive; and when the real spirit of contemporary domestic architecture is considered, restraint is found to be its moulding quality. Not the hard, puritanical prohibition of embellishment, the savage censure of ornament that springs from fanatical rather than civilized simplicity; but the restraint that grows easily and naturally from a scholarly regard for tradition allied with a clear appreciation of the realities and needs of the present time.

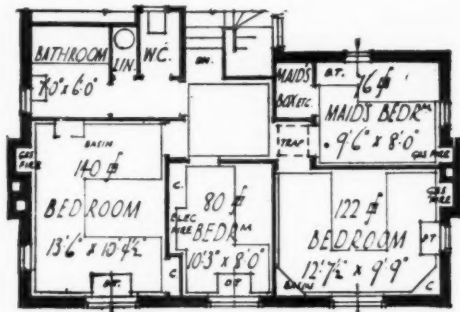
*No. 16 Essex Street, Strand. By W. and E. Hunt. Above, the entrance front. Below, plans of ground and typical upper floor.*







First floor plan.



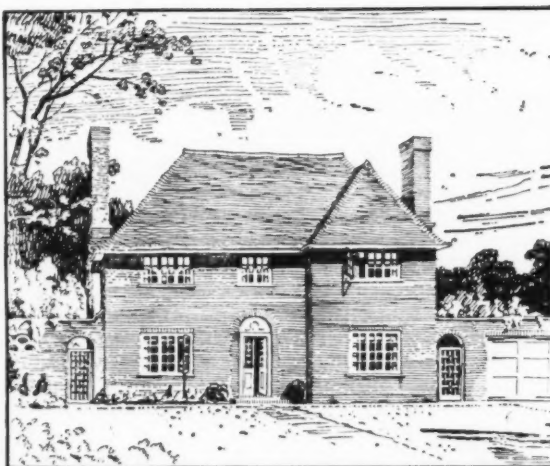
First floor plan.



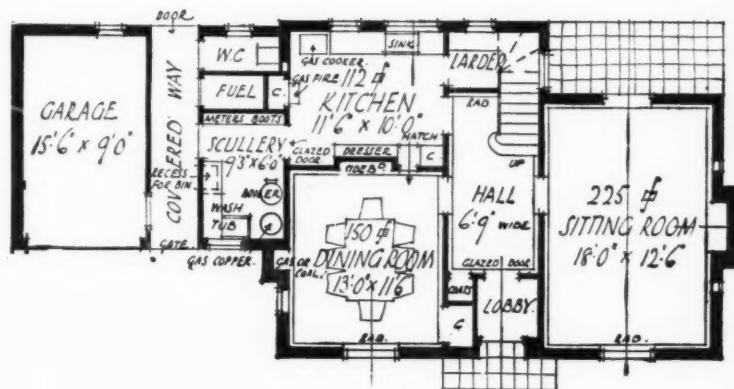
Ground floor plan.



The entrance front.



The entrance front.



Ground floor plan.

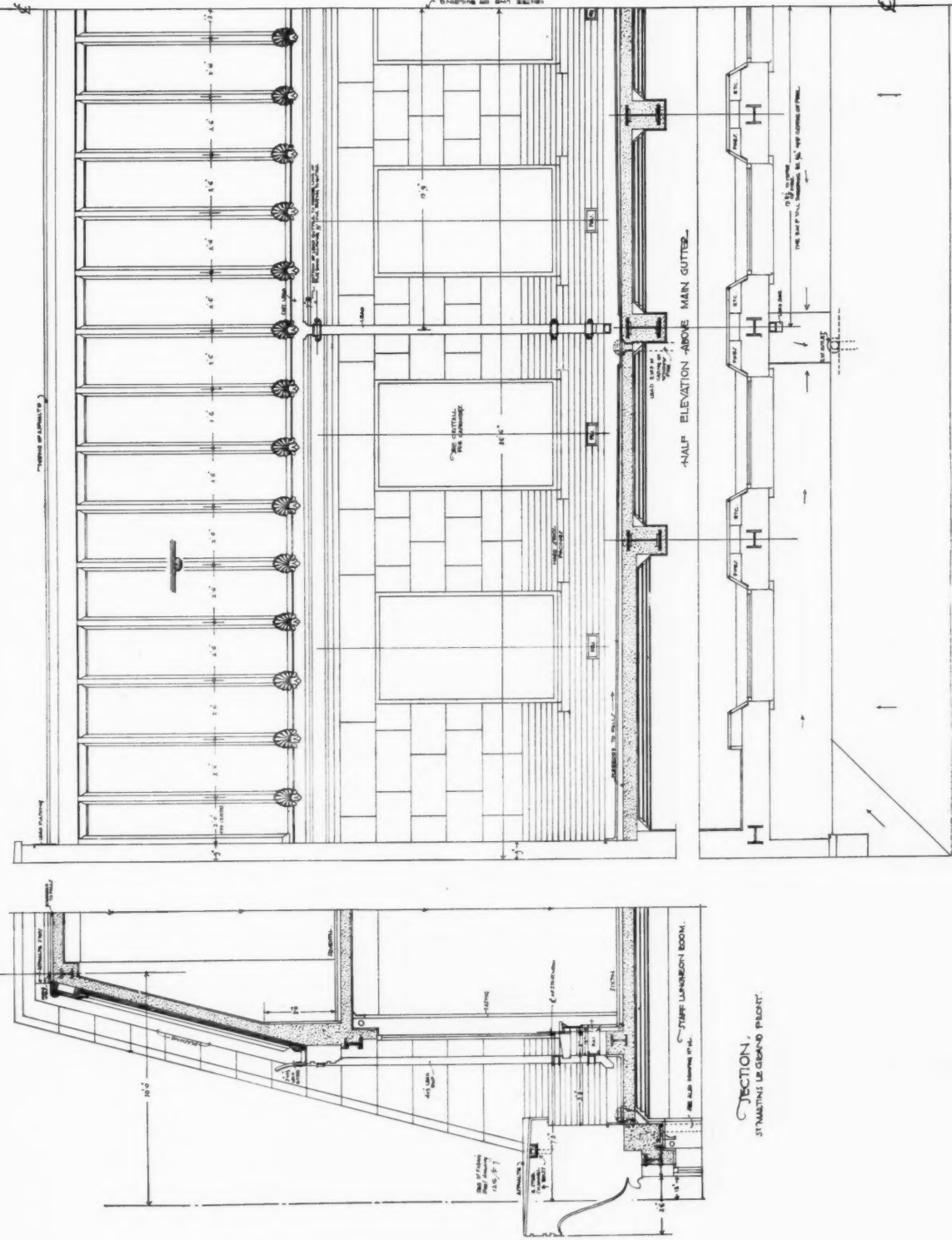
The Daily Mail Ideal Houses Competition. E. Guy Dawber, Louis de Soissons, and C. W. Miskin, assessors. Class A, house to cost £1,500. Left, first premiated design. By Gordon Allen. Right, second premiated design. By Donald H. McMorran.





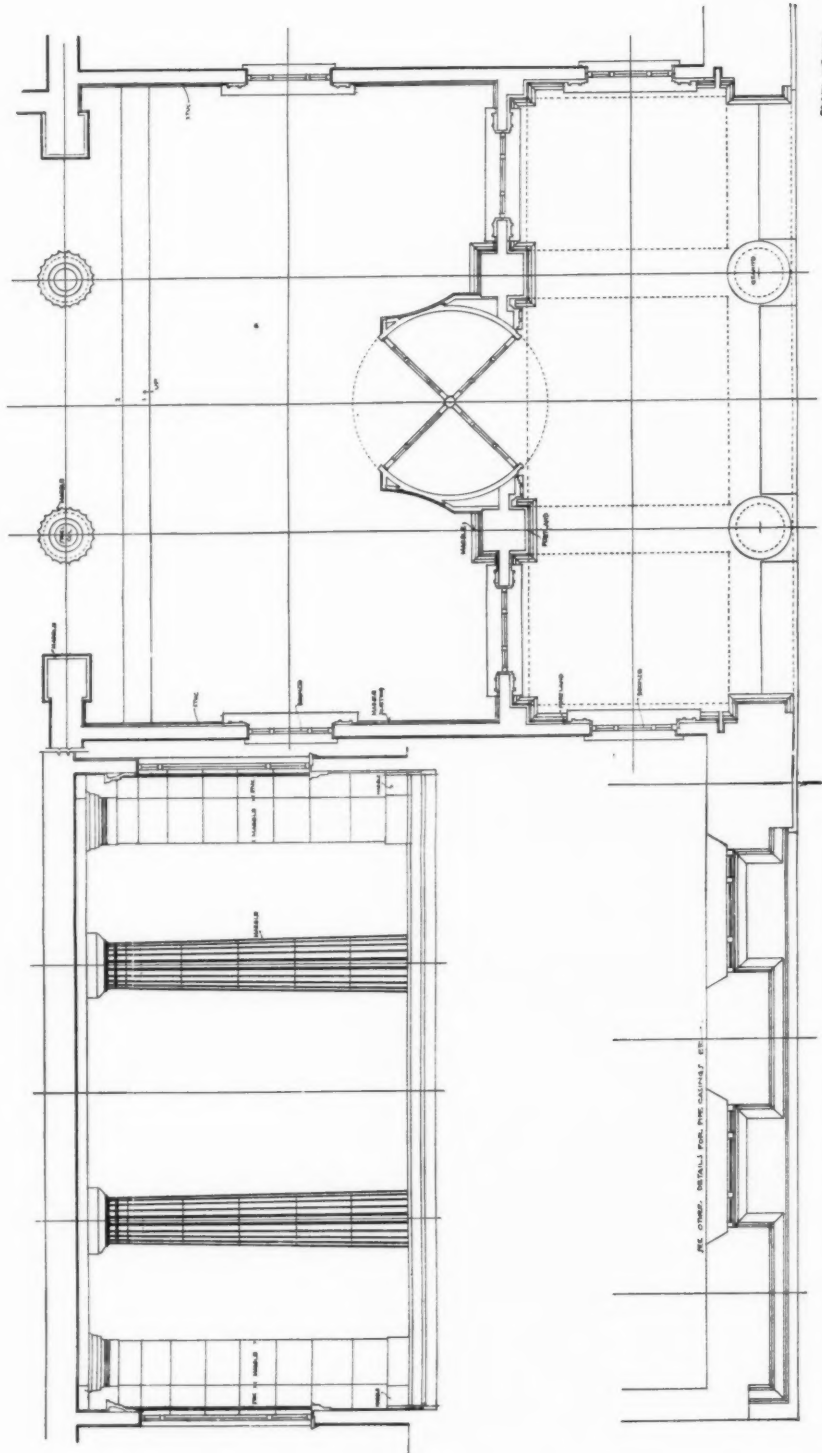
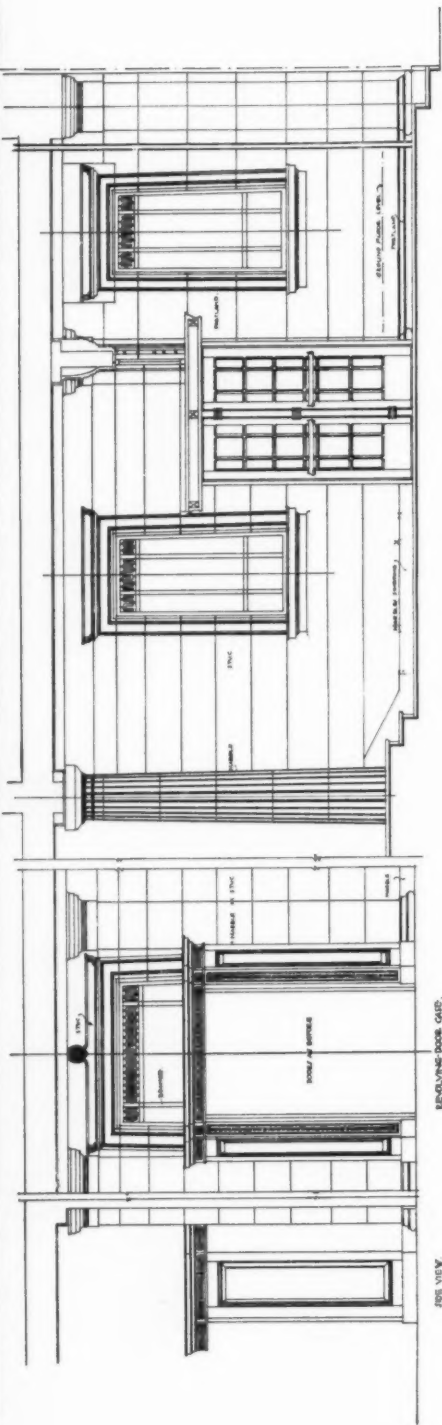


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188 JULY 1937

SEE ALSO DRAWING NO. 14



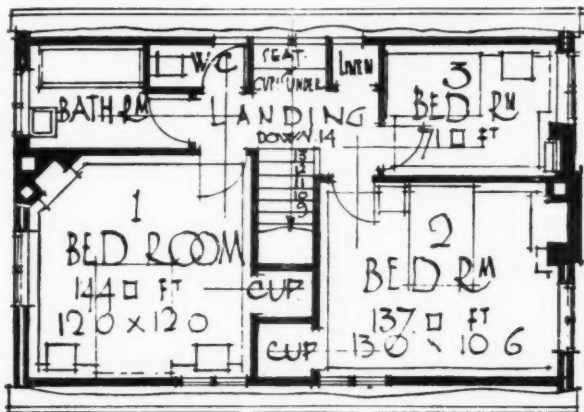
REVOLVING DOOR, GARD.  
LIFE JUNE 1914.

MESSRS. COURTAULDS LTD. PREMISES, ST. MARTIN'S-LE-GRAND.  
BY L. S. SULLIVAN. ABOVE, DETAILS OF THE MAIN CORNICE TO  
THE FRONT ELEVATION. BELOW, DETAILS OF THE ENTRANCE HALL.

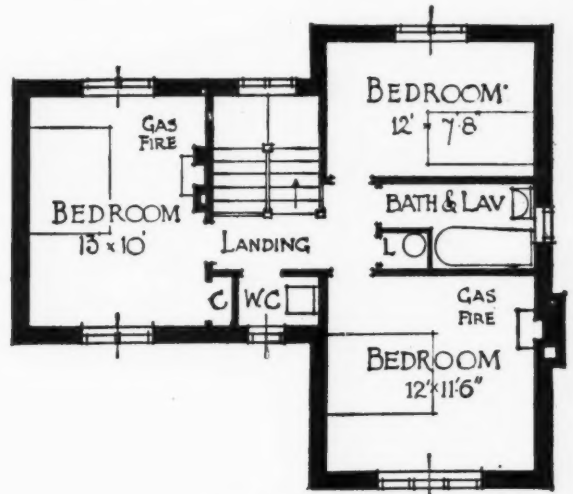




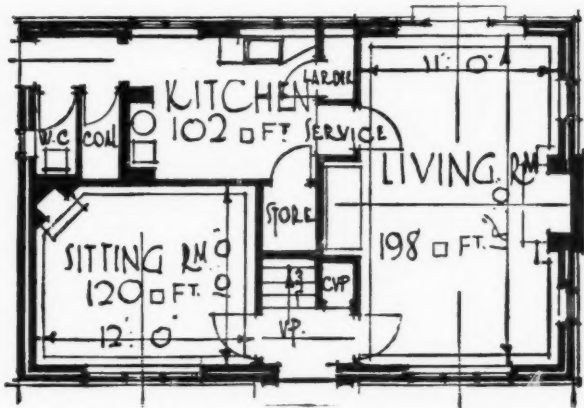




First floor plan.



First floor plan.



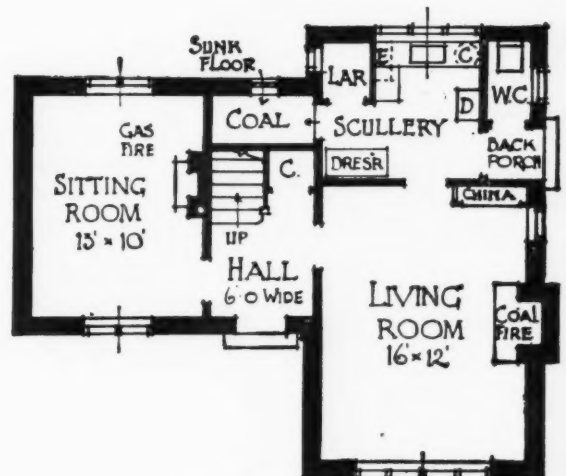
Ground floor plan.



The entrance front.



The entrance front.



Ground floor plan.

The Daily Mail Ideal Houses Competition. E. Guy Dawber, Louis de Soissons, and C. W. Miskin, assessors. Class B, house to cost £850. Left, first premiated design. By Theophile Schaerer. Right, second premiated design. By Richard A. F. Riding.

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*Karsnick*

*was to have finished his series "Tribulations of Early Practice," which has been appearing on this page, on December 29 last. So great an interest, however, was taken by our readers in the last few articles that we have requested*

*Karsnick*

*to prolong his scrutiny of the final stages of a building job to which he had arrived, and to make these stages the subject of a special short series entitled*

#### SETTLING UP

*This series will consist of four or five articles, and will start publication in February next. The exact date of its appearance will be announced later; meanwhile we leave our readers to look forward to it as the culmination of one of the most popular series ever published in THE ARCHITECTS' JOURNAL.—Editor, A.J.*

## AMERICAN BUILDING METHODS

[ T. S. TAIT ]

### I: ORGANIZATION

IN these times of labour troubles and building activity in England, it is as essential for every architect and draughtsman in this country to pay a visit to America to study modern buildings, and methods of erection as it was in the past to visit the Continent to study ancient architecture. While Europe is in the throes of a so-called revival in which everything ancient is discarded in an attempt to create something new, America, on the other hand, embodies the old traditions in its enormous new building in brick and stone, and is producing an architecture which rivals in refinement and beauty the best buildings of the past. Mr. Selfridge, one of the greatest enthusiasts of architecture we have in this country, asked why I did not pay a visit to America, and although informed that I had spent three months there before the war, he considered this no reason for not going again, and with his usual impetuosity asked me the next day if I had bought my ticket. I consider my visit there was invaluable both to myself and to my firm, as not only did I see those enormous up-to-date and magnificent buildings, but I had a further insight into the management of architects' offices; and what surprised me most was the speed with which buildings of great size were carried out. Buildings which in this country would take about three years to erect were carried out there within the year.

The Radiator building in New York, by Raymond Hood, architect, is over 260 ft. high, and was finished in one year from the date the architect received his commission! It is a spectacular building, built of black brick and gold terra-cotta and is designed like a cathedral tower, i.e. architecturally treated all round, not on one façade only. The Tribune building, one of the finest buildings in America, was designed by the same architect. It is in stone, and is rich with the most delicate carving and tracery. It is 300 ft. high, and was completed in nine months from the level of the third floor up.

What is it that makes it possible to work with such expedition? The credit does not lie with contractors alone, as I believe there are as fine contractors here as in America. There are many reasons which it behoves the architects in this country to take note of.

First: There is the organization of the architect's own office.

When an architect is asked to design a building in the States, the first thing he is asked is not so much what it will cost, as how long it will take to erect. The reason for this is the enormous rental asked for ground, and the client rightly realizes that the sooner it is erected the quicker return he will get for his money. The architect in this case immediately prepares a time schedule in graphic form, and if it is to be completed in one year he usually allows a fortnight or three weeks for sketch plans.

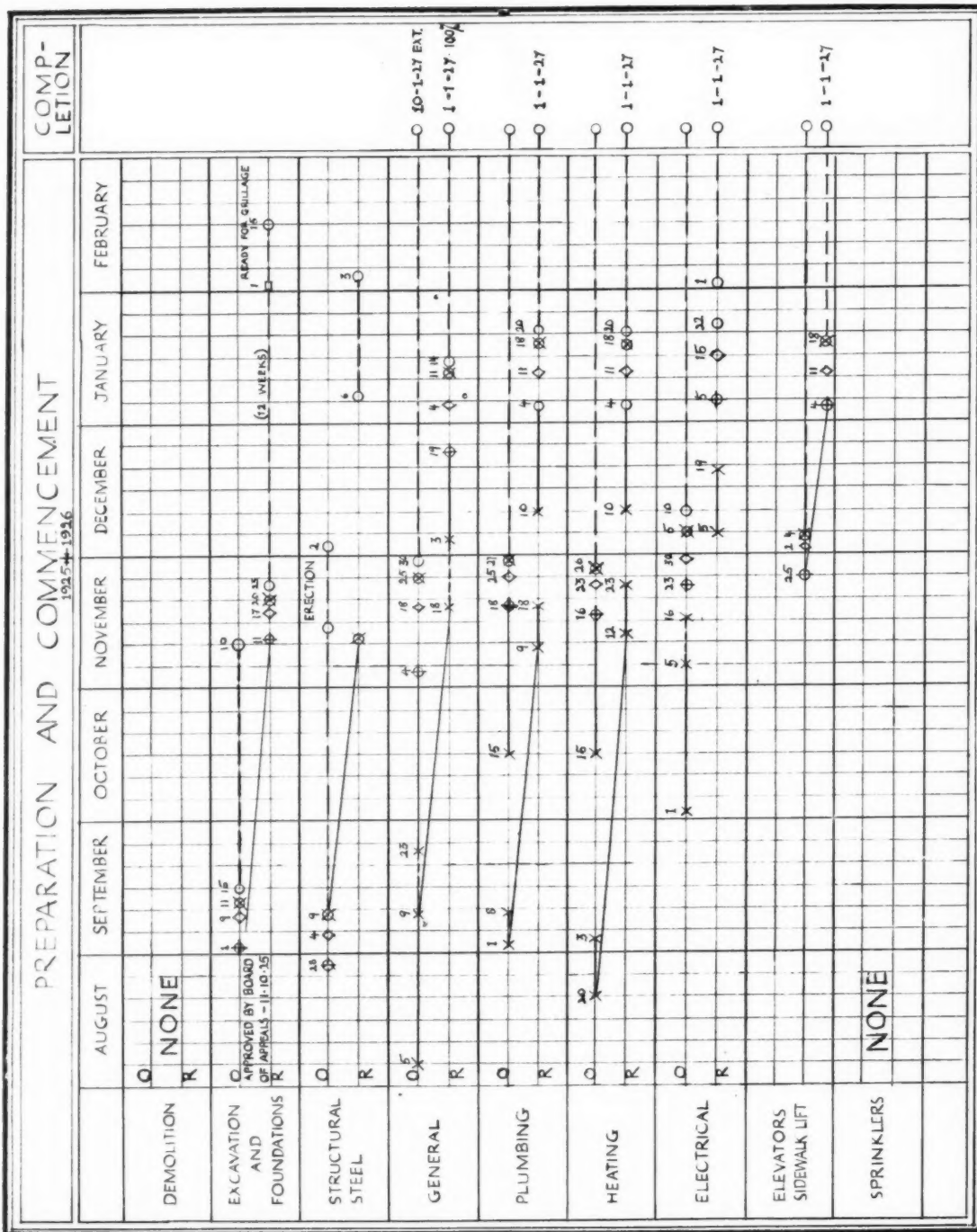
Secondly, and very important: He allows about a fortnight for information to be received from the client. If the client fails to forward this information in the scheduled time a red line is shown extended to give the time it took to receive it, and a copy of the graph is forwarded to the client informing him that the job will take so much longer. Should the client fail to send the information at all, the building is proceeded with, and the client has to accept the planning arrangement given by the architect. No alteration is allowed to be done by the client after the building is started, without his being informed of the extra money it will cost, and the extra time it will take to carry out.

Thirdly: The time allowed the draughtsman in charge, or "job captain," as he is called, to complete the working drawings. It is up to this man to see that they are done in time and to engage all necessary assistance, as lack of assistance is no excuse for the work not being completed. The time allowed may be five to six months for this work, which includes specifications (there are no quantities prepared), and all mechanical and steelwork drawings, etc. (as this work is carried out in most architects' offices). In Hollabird and Roach's office in Chicago they employ thirty mechanical draughtsmen alone, and this does not include steelwork designers.

Fourthly: The time allowed for erection. This, in many cases, is less than the time allowed for the preparation of the drawings.

Beyond this, I believe, one of the main reasons for the slowness in erecting buildings in our country is our system of preparing quantities. Not that the preparation of quantities itself is wrong, but that the architects in this country rely too much on the quantity surveyor. When a client asks how long it will take to receive tenders, and six months is given, that only leaves the architect about three months to prepare all plans and details, as the surveyor will require at least three months for his work. The result is that the architect, in the majority of cases, prepares an incomplete set of drawings with a skimpy specification and the plans leave the office for three months, during which time the architect can do nothing. The quantity surveyor not finding full information on the plans supplies his own, with the result that when the job is accepted, the architect immediately proceeds to amend or complete his working drawings and alters the specification. The quantities become merely a schedule of prices, and give no information either to the draughtsmen or the clerk of works, owing solely to the fact that the architect does not work out everything on the job to the smallest detail before the plans are issued to tender. In America the plans and specifications must be complete otherwise the contractors could not give a tender, and when the bids are received the work is ready to be proceeded with without delay, as the contractor has all his information. The writing of this specification, which is done in the architect's office alongside the draughtsmen preparing the plans, is a complete and formidable document. It is usually in three sections: First: A general specification of the materials and design. Secondly: A description of each room in detail, i.e. what the floors, walls, ceiling, doors, paintwork, etc., are to be finished with. Thirdly: A specification describing the materials in detail, so that the clerk of works, or outside superintendent as he is called (a very responsible official over there, as he organizes the different trades), has no doubt as to what is intended on any portion of the work.

Another important factor contributing to rapid construction is the number of shop drawings that are prepared by the contractors. Every contractor must prepare shop drawings of the particular work he is connected with for submission to the architect. Immediately the contract is accepted, although American plans must of necessity be very complete and fully dimensioned, the general



**SYMBOLS**  
 X → DESIGN  
 X --- X OWNER  
 ⊕ TO BID  
 ⊕ BIDS DUE  
 ⊕ AWARD  
 ⊕ CONSTRUCTION  
 O = ORIGINAL SCHEME  
 R = SCHEME AS REVISED DURING CONSTRUCTION

DIAGONAL LINES REPRESENT DELAYS IN STARTING

A typical time schedule used in American architects' offices to show the progress of building work.

contractor must prepare drawings showing the size and position of every opening on the job. These are forwarded in duplicate to the architect. On approval by him copies are sent to every sub-contractor who is doing anything in relation to the work. When the firm who is making, say, the windows receives them, he in turn prepares his shop drawings which must again be submitted to the architect. On these being approved, he must forthwith issue copies of these, together with the size of every pane of glass on the job, to the glass manufacturer. In this way each sub-contractor can get down to his work at once without waiting to take measurements after the brickwork or other work is completed. This, I consider, is a very important factor in quick construction, and should be stipulated in every specification. Until this is done, we can never hope for good building organization.

Many architects in this country are sceptical about the speed of American construction, and feel that it cannot make for good work. I regard their method as more conducive to good work than ours, as they start with plenty of time ahead, whereas our method tends to leave everything to the end, when there is a rush with every one falling over each other to get done. Take for example the finishing of a staircase—as a rule the last thing to be started on a job, and the first thing wanted, as the building cannot be occupied without it. The stair-railer or metal worker usually starts enthusiastically, and goes to the job to verify dimensions. There is nothing built, and on seeing the foreman he is informed that he must be responsible for his own sizes. The result is that he has to wait until the stair is up before he starts making, in many instances, an elaborate metal railing with all its models, patterns, and castings, and he, with plasterers, painters, and lift engineers are all working on top of one another in a confined space on the only access from one floor to another. This is not conducive to good work, nor is it good organization.

Another essential point, besides good organization, in connection with quick construction—by quick construction I do not necessarily mean work which is hustled or scamped—is that each man on the job does his best. In the States there is no such thing as a "ca-canny" attitude with the workmen, and the only hope for the building trade as well as every other trade in this country is that this attitude be wiped out. This can only be done by the two parties controlling labour: first, the trades union; and, secondly, the masters. The trades union stipulate a minimum wage whether the workman is worth his salt or not, and the masters stipulate a maximum wage, which gives no incentive to the good craftsman to do his best either as regards workmanship or as regards output; in other words, good and bad workmen get the same rate of wages. Labour is under the impression that if the workmen "ca-canny," the work will last longer. That which is under way at the moment naturally will, unfortunately for the client, but it has the effect of smothering at birth a large volume of work which would otherwise go on.

In the States the workmen are earning good wages (in some cases £18 per week), but they do a good day's work, earn good money, and yet have sufficient leisure to enjoy it. It is interesting to visit some of the large works in progress with their rows of workmen's cars parked alongside, and it amused me to hear a Scots mechanic's wife remark, with a twinkle in her eye, that her husband, who had been unemployed for eighteen months in Scotland, had become so "efficient" since going to the States that he took a taxi whenever he was late for work, if his own car was out of order. This question of big wages is, of course, to a great extent a matter of supply and demand, and as there is a greater demand for workmen there than there is for the "white collar brigade," an outside mechanic gets more than an engineering draughtsman. The same applies to the bricklayer and the architectural draughtsman. The bricklayer gets £17 to £18 a week, while the average salary for an architectural draughtsman is £10 to £12. I have no doubt that the demand for workmen and the subsequent big wages offered in order to get the work done in contract time create a vicious circle which is not altogether pleasing to the contractors employing them, as the offer of higher wages draws off workmen from other and lesser jobs, but they at least get the work done.

My own experience of clients is that they are willing to pay the increased price, if the time could be cut down by half. The contractors themselves would benefit, for although necessarily their wages costs are increased, due to the larger organization with its staff of draughtsmen, costing and estimating clerks, etc., the duration of the employment of this increased staff is more than correspondingly reduced.

To sum up, I consider an improvement is required in this country. First: By architects making more complete drawings and specifications. Second: By the preparation of accurate shop drawings by all contractors and sub-contractors, to be supplied to other trades. Third: By the elimination of the "ca-canny" attitude of the men by giving them what they are worth. Fourth: By the elimination of strikes and withdrawing the soul-destroying dole, as no individual or nation can stand or last without enterprise, hard work, and self-respect.

[To be continued]

## LITERATURE

BALBUS

The credo of so controversial a person as Mr. Barman needs no bush. Yet on reading *Balbus* I found myself wondering what that highly unimaginative contractor thought of his apotheosis to the seat of prophecy. Still greater paradox—I beheld John Knox in the limbo of predestined iconoclasts a-chuckle over this belated protocol to his celebrated *Counterblast*. For not even a diffidence in thrusting his pessimism upon a feminist public can hide Mr. Barman's aversion from the architectural regiment of women. That, and nothing less, it seems, is responsible for the modern stultification of the architectural problem. "No longer is the building composed of an expressive sequence of definitely-formed cavities; there is only layer upon layer of formless space, tier upon tier of vacant sites, along which the hundred specialized departments may pitch their glittering booths." And a series of diagrams illustrating the formal content of past and present types of building clinches his argument that emancipated woman, "as a consumer of wealth is transforming the design of our buildings more thoroughly than is clear even to-day"—an argument which, I take leave to say, would have been more forcible had Mr. Barman stressed at the outset his somewhat cursory admission that her influence as a consumer is backed by her new status as a producer. The sole refuge visible in a world of æsthetic decay lies in the application of zoning laws to impose a canon of external form. And even this hope is blighted by a lugubrious review of the racial genius for wisdom after the event; the patchwork of New York becomes the all-but-inevitable destiny of our own cities, until the insipidation of his morbid humour drives Mr. Barman to the breezier atmosphere of country planning. If *Balbus* is past praying for, let us deliver still artless Tityrus from the havoc of Balbisation.

This is fatalistic to the verge of pessimism, and the less convincingly so because the feminist motive is developed just a little too exclusively. At the outset Mr. Barman rejects *in toto* the current notion that design is determined by materials, and calls to witness the practice of music, medicine, and motor-building. But music, of all the arts, has ever been determined precisely by the very materials which Mr. Barman scorns. Haydn at Queen's Hall is a mass of fussy nothings; coop him in a moderate-sized hall with the chamber orchestra he wrote for, and all the domestic intimacy of his purpose is manifest; the design of motor-engines depends not only on the work it is intended for, but also on the tensile and heat-resisting qualities of metals, to say nothing of petrol and lubricants. Similarly, it is difficult to accept the view that demand alone has produced the departmental building of to-day; it is quite as much a matter of adaptability of materials.

Nor can I accept with equal gloom Mr. Barman's lament for the passing of the original function of the architect, viz. the suitable enclosure of a given complex of spaces. That the function is changing is undeniable, and his illustration of the change alone makes Mr. Barman's essay worth one's while, but (not being an architect) I fail to grasp the essential inferiority of giving a recognizable form to a loosely-defined section of more or less abstract



space; indeed, the problem is so modern and its solutions hitherto are such dubious successes that the profession ought surely to rejoice at new fields to conquer. Different, yes; but inferior—that is Tory pessimism.

These, after all, are mainly questions of opinion; and debatability is the passport of modern prophecy. *Balbus* is a real contribution to the literature, not only of controversy, but of lay instruction as well; the architectural past, even the present, are at the hand of anyone with a taste for evolution. But a deliberate unravelling of the modern problem from the entanglement of history is something new. It is time the public ceased to live in the æsthetic past.

C. CAMPBELL CROWTHER

*Balbus, or The Future of Architecture.* By Christian Barman. London: Kegan, Paul. 2s. 6d.

#### THE ART AND CRAFT OF GARDEN MAKING

This book is a great undertaking. The result of a lifetime of exploration in garden craft should appeal to architect and layman interested in the carrying out of the garden. Briefly, the book is divided into a rhythm of divisions, emphasized by charming sketches, and giving a basis on which the thousand and one things of the garden are sorted out and explained. We learn, for instance, not only how to plant, cut, clip, or snip a hedge, but we learn the significance of its design, and all in an interesting manner. The varied collection of photos and drawings give rise to ideas that may or may not be discussed in the text. A view of crazy paving wandering among *Campanula* and *Yucca* suggests how this questionable conceit finds its home. Yet here lies the rub. There is so much of real value to the practical mind, that it may be said, metaphorically, one cannot see the garden for the flowers.

"It is easier to build stately than to garden finely," writes Bacon, and the authors feel this to be true. If all art is to serve man, is there another branch that needs so much to explore and

blend with the wholly unknown art of Nature? Few other arts, also, need to reflect so clearly the man for whom they are conceived, and the infinite shades of the mind call for a corresponding subtlety in planning. Throw the plan out of keeping with the personality either of Nature, or of man, and there is uneasiness. It is this dual necessity that makes the art so profound. Though phrases and sentences are occasionally dropped that lead us to the threshold, there is in all the chapters of this book only one that deals entirely with the abstract. Again, in the expression of this abstract, there is a lack of exploration. One reads constantly that such and such a detail must have a relation to the whole scheme, but it is the detail and its craft that hold the place of honour. The study of garden design might extend over many volumes of the one of present size before it exhausted the art so completely as this has the craft.

What are called "the foreign styles of garden design" are viewed with our usual insular suspicion, and although the authors agree that "the garden, as a means of serious art expression, has never presented itself to the minds of most people in this country," the vast range of psychological study that these present is debarred. The Italians displayed in their gardens as high a sense of design and appreciation as in any of the arts: with supreme success they blended the temperament of Nature with their own unique temperament. Here is a study in which the word "style" need never be mentioned, a study in which the principles of garden design do, indeed, prove themselves "unaltered and unalterable." France, while carrying the forms of the Italians to perfection, is interesting in this respect for having swept aside the finer shades of humanity with one bold gesture. England, however, has suffered so much from the invasion of foreign forms that it is at least a relief to turn to the work of a man who has steadily built up an expression of his own.

Much of the authors' work is illustrated, and it is interesting.



*Shelters at the end of the glade, Lewiston Manor.*  
[From *The Art and Craft of Garden Making*.]





*Campanula and Yucca at Sedgwick. [From  
The Art and Craft of Garden Making.]*

Although not analysed deeply, it provides to the reader the study of an individual outlook. It cannot, however, be said to cover the whole art of garden design, and the book is, therefore, not what the title suggests. Under the title the work of contemporary designers should have been included. Sir Edward Lutyens alone has brought the art possibly to as high a level as any the world knows; apart from quality of detail, there is in his work an amazing grasp of unity, of spaces linking themselves round the house and reflecting its subtle balance and character. Yet while one regrets the scope of the book, one cannot fail to appreciate one generous outlook. The English school of landscape gardening of the last century is here not treated with the contempt with which it is usually regarded in this period of reaction. The authors have set out to separate the corn from the chaff, suggesting the ideals and possibilities that lie beneath those unfortunate works. For a firm who have been a bulwark to the formal garden, and who stand among those who are trying to eradicate the harm of that age, this even judgment is a triumph.

G. A. JELlicoe

*The Art and Craft of Garden Making.* By Thomas H. Mawson and E. Prentice Mawson. Fifth edition. Batsford. Price £3 15s. 0d.

#### THE CATHEDRALS OF SCOTLAND

Mr. Ian Lindsay, of Trinity College, Cambridge, has accomplished a valuable piece of architectural research, for he is the first to give a succinct account of the cathedrals of Scotland. His book is profusely illustrated, and is distinguished by an attractive narrative style. Mr. Lindsay points out for the benefit of those who do not know Scotland that the Established Church is Presbyterian, and, therefore, none of the ancient cathedrals which are still in use contain the cathedra or throne of a bishop.

Consequently they are not to-day cathedrals in the full sense of the word as are the modern ones belonging either to the Episcopal Church or the Roman Catholic Church.

These cathedrals possess, in a high degree, the characteristics which belong to the best Scottish architecture, namely, a grandeur combined with a certain hardness and severity which suggests that the men responsible for its creation desired to build worthily, to build for all time, and yet with the utmost economy of means. It may be that the plentiful supply of very hard stone has had much to do with the establishment of this Scottish convention. If we contrast, for instance, the cathedrals at Aberdeen, Brechin, Dornoch, Dunblane, Elgin, Pannsport, and Glasgow, with the more decorative ecclesiastical architecture of the south, we immediately realize that we are here in the presence of a style characterized by great restraint. The Scottish churches, however, have the dual merit of being completely devoid of affectation, and of being for the most part very well composed. Whatever formal blemishes are now noticeable in their designs are, as Mr. Lindsay points out, giving chapter and verse for all his assertions, entirely due to the destructive activities of the Gothic Revivalists who, in practically every case where they meddled with the fabrics of the cathedrals with the intention of "restoring" them, performed their task in the most maladroit way imaginable. It is even true to say that these medievalist doctrinaires inflicted far more damage upon the cathedrals than did the fanatical followers of Oliver Cromwell, for while these latter generally confined their attention to smashing images and church furniture the Revivalists were apt to attempt reconstruction on a large scale. In fact, some of Mr. Lindsay's records of the history of the cathedrals are a melancholy tale of vandalism. Yet he makes one realize the very solid achievement which stands to the credit of the Scotch

medieval builders and the reader cannot fail to be attracted by the skilful manner in which he blends architectural criticism with history and anecdote. He is malicious enough, however, to quote from Ruskin the following characteristic commentary on Dunblane Abbey: "It is acknowledged to be beautiful by the most careless observer, and why beautiful? Simply because in its great contours it has a form of a forest leaf, and because in its decoration it has used nothing but forest leaves. He was no common man who designed that cathedral of Dunblane. Instead of putting a merely formal dog-tooth, as everybody else did at that time, he went down to the woody bank of the sweet river beneath the rocks on which he was building and he took up a few of the fallen leaves that lay by it and he set them in his arch side by side for ever." Perhaps the two finest of the cathedrals were Elgin and Glasgow, both of which in their original state were worthy to be counted among the masterpieces of Gothic art, while especial reference must also be made to Kirkwell Cathedral in the Orkneys, which is surely one of the finest in the kingdom. Mr. Lindsay concludes his survey with an account of the modern cathedrals of Scotland in the designs of which, however, he can find little to praise. This is a book which every student of medieval architecture may read with interest and profit.

A. T. E.

*The Cathedrals of Scotland.* By Ian Gordon Lindsay. (Foreword by Sir George Douglas, Baronet.) Published by W. and R. Chambers, Ltd., Edinburgh. 7s. 6d. net.

#### VERSES BY AN ARCHITECT

*Swift Nicks* is a collection of poems by Mr. Harry Prince, who is also an architect; if it cannot be claimed that the verses show exceptionally high talent, they are at least quite readable and reveal the author's gift of rhyme and metre. Some of the poems would have been better if they had been allowed greater length, but others, especially those which have an architectural trend, are amusing enough; there is besides a variety of subjects including pirates, duels, taverns, buccaneers, and highwaymen. One of the best is that which provides the title for the book: *Swift Nicks* was the notorious highwayman, William Nevison, who performed the famous "ride to York" from Rochester, generally attributed to Turpin. Many of the poems display a freedom of rhyme reminiscent of some of the eighteenth-century poets.

M. L. A.

*Swift Nicks and other Ballads.* By Harry Prince, A.R.I.B.A. The C. W. Daniel Company. 3s. 6d. net.

## CORRESPONDENCE

### AUTHORITY AND LIBERTY IN ARCHITECTURE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Mr. Trystan Edwards misquotes me. He says I describe the old Regent Street as "vulgar and uninspiring," but what I did say was that it was "dull and uninspiring," which is quite a different thing. Perhaps dullness precedes vulgarity, for it could be argued that vulgarity arises as a reaction against dullness. Anyway, it is not without significance that Nash not only designed Regent Street, but was one of the pioneers of the Gothic revival, and, therefore, according to Mr. Edwards, of vulgarity. I do not dispute the fact that most of the work of the Gothic revival was vulgar. It does not affect my position to admit it, whereas it does, it appears, affect Mr. Edwards's position to admit that the old Regent Street was dull. He is pained at its disappearance, and to some extent, I suppose, I am sorry to see it go. It was part of the old world to which we are attached. But I cannot weep over it. It was not good enough for that. What does make me weep is to hear tenth-rate architecture boosted as first-class stuff. There is a real peril in such boosting. It undermines our sense of architectural values, and I attack the boosters of Regent Street because they corrupt architectural thought.

Mr. Edwards does not understand this. He thinks that the real difference between myself and him is that, while to him the civic aspect of architecture is supremely important, I have scarcely begun to take an interest in it at all, otherwise I would not give my

blessing to the skyscraper commercial buildings of America. Mr. Edwards, in this connection, presumably refers to some articles I wrote a couple of years ago on this subject, which appeared in *Architecture*, and in which, while deprecating the skyscraper as institution, I paid tribute to the architectural beauty of the more recent ones. If I am to be criticized for this, so is Sir Edwin Lutyens, for I understand that when he visited the United States last year he was as much impressed as I was. Would Mr. Edwards say that Sir Edwin Lutyens was impressed by the skyscrapers because he had scarcely begun to think about civic architecture? I presume not. Why, then, should Mr. Edwards use such an argument against me?

But why should Mr. Edwards assume that anyone who comes to different conclusions to himself about a subject has never thought about it? Are we to deny the beauty of the medieval towns of Europe because they do not conform to the standards of old Regent Street? for if the canons of Mr. Edwards are valid this is what it comes to. Mr. Edwards says the standard which he applies to architecture is a civic standard, and if a building flagrantly defies this standard it is equally reprehensible, whether its style be Gothic or Classic. I might say exactly the same thing, and with more reason, for the standards to which I subscribe do not exclude the Early Renaissance. But I cannot see its application in the case of Mr. Edwards; for the canons upon which he insists are Late Renaissance standards, and as such are incompatible with anything Gothic. I will begin to take this statement seriously when he explains how his principles can be applied to Nuremberg, to Chartres, or Mont St. Michel.

The defect of Mr. Edwards, it seems to me, is that he can only conceive of order in the terms of uniformity. He is like those sociologists who can only conceive of social order in the terms of regimentation, and pictures every opponent of regimentation as an anarchist. He sees civic architecture as something proceeding from a drawing-board with a tee-square, the rules of Vitruvius, and a volume of Batty Langley. It is something external to be imposed, and I think his idea might be defined as "Policeman Architecture." Now, there is a conception of architecture which is fundamentally different. It does not dispense with order, but conceives of it in different terms, as something proceeding from a very lively aesthetic sense rather than from a system of rules. It is dynamic rather than static. Some idea of what I mean by civic architecture is to be gathered from the Stockholm Town Hall, which is a building that indicates to some extent the direction in which civic architecture might have gone in this country had we not abandoned our traditions. In an article I read on its architect, Ragnar Östberg, by a countryman of his, I see that he was a product of a nationalist movement in Swedish architecture, which took place in the nineties and was inspired by the work of Norman Shaw, George Devey, and Philip Webb. What is more interesting is that this revival was the consequence of throwing overboard the cosmopolitan Renaissance idea and a return to native tradition. What has Mr. Edwards to say about this?

There is another thing I want to say. The assumption behind Mr. Edwards's remarks about civic architecture is that nobody ever gave any attention to the subject until the school which he represents came along. It is necessary to inform him such is not the case. On the contrary, interest in this subject in this country began with the garden city movement and the propaganda of Dr. Raymond Unwin, who directed the attention of architects in this country to the literature of German and other Continental town planners. And what is more significant is that this literature was more particularly concerned to understand the principles underlying the planning of medieval towns which they had concluded were the result to a large extent of conscious planning and not a mere fortuitous arrangement. When all the rough-and-tumble pioneer work had been done and a public interest in the subject created, the ultra-Classical school began to exploit the idea. And now, lo and behold! they not only persuade themselves that but for them civic architecture would not have been heard of, but have the presumption to assume that whoever differs from them can never have given a moment's thought to the subject! They are cuckoos who first lay their eggs in nests built by others and then

proceed to tell us that only on their principles can nests be built at all. History is continually being falsified. But one would have to go a long way to find a grosser travesty of historical truth than that of which the ultra-Classical school have been guilty, not only in this connection but in everything connected with the revival of architecture. I have watched this process of falsification going on for more than twenty years, and wondered how it would end. Nowadays I know. Its end is the philosophy of Mr. Trystan Edwards. I do not blame him, for he is not to blame. He is the victim of false doctrine and false history. The blame rests with those learned professors who were so anxious to secure the ascendancy of Classic as to misrepresent everything and everybody with other aims, until at last an atmosphere has come into existence so far removed from reality that Mr. Edwards is simply incredulous when the curtain is drawn.

A. J. PENTY

*To the Editor of THE ARCHITECTS' JOURNAL*

SIR,—Mr. Penty's letter, in which he says that writing articles is like talking to dumb men in the dark, touches a responsive chord, and I should like to be allowed to speak as a voice from the darkness, and to express the appreciation of all those silent readers (and I am sure they are many) who heartily agree with his views about building.

There is a book by Mr. Geoffrey Scott which sets forth to describe various so-called fallacies in building, which do not appear to me to be fallacies at all. Amongst these is the biological "fallacy"—that conception of building which assumes that it follows the same course as a living organism through the various phases of youth, maturity, and old age. If we apply this particular "fallacy" to the building done between the dates of 1750 and 1830 it seems clear that this period had all the characteristics of an ageing art. The vigorous crudities of youth and the rich fruition of maturity are over and gone; there are no more eager experiments; all is vanity. It is the Nirvana of the artist. Everything is fined down, and all the redundant, fleshy vigour of the earlier work is reduced to its utmost limits. There are no more chubby sash bars, or sturdy moulded balusters; and so in a house, say of the Regency period, I am always reminded of a gracious and *spirituelle* old lady, frail and elegant. I should not like, therefore, to say it is not as good as the work which preceded it. It should not be compared with it at all. It has its own peculiar charm, which is that of a beautiful old age.

But this dear old lady has in due course passed away, and her honoured place taken by a new generation, the attributes of which may be summed up in George Meredith's lines:

From this unrest, lo! early wrecked  
A Future staggers crazy,  
Ophelia of the ages deck't  
With woeful weed and daisy.

BAILLIE SCOTT

## ANNOUNCEMENTS

Mr. Clarence W. Porter, architect, has moved his offices to No. 6 Market Square, Stafford.

Mr. Cyril A. Farey, A.R.I.B.A., has moved to 7 Bedford Square, London, W.C.1. Telephone: Museum 2420.

Mr. Walter Cave, F.R.I.B.A., has moved his offices to 132a Cromwell Road, S.W.7 (near Gloucester Road Station).

Mr. W. Wilkinson, having commenced a practice at No. 6 Queen Street, Scarborough, desires trade circulars, catalogues, samples, etc.

To mark the opening of the third extension of their main London factory in Falmouth Road, Great Dover Street, the chairman and directors of Waygood-Otis Ltd., invited all their London staff and employees to an inspection of the greatly enlarged workshops, etc. There were upwards of 900 present, and during the evening an entertainment, provided by the Morris-Ashton concert party of Felixstowe was much appreciated. A vote of thanks was

given to the directors on the motion of Mr. Piper and Mr. Percival.

Mr. Francis John Sturdy, F.R.I.B.A., is retiring from practice after half a century of professional activity. The firm will continue practice as heretofore under the old title, Yetts, Sturdy and Usher, at 115 Moorgate, London, E.C.2.

The partnership subsisting between Mr. G. Dudley Harbron, F.R.I.B.A., and Mr. Frederick Robson, L.R.I.B.A., has been dissolved by mutual consent. Mr. G. Dudley Harbron will continue to practise at 34 George Street, Hull. Telephone: Central 246x. Mr. Frederick Robson will practise at Southam Chambers, Waltham Street, Hull. Telephone: Central 1255.

Through the timely intervention of Mr. A. Southcombe Parker, a Plymouth architect, who has been the means of saving a good deal of historic property from destruction, the old Custom House on the quay at Plymouth, which is to be converted into a motor garage, will have its most interesting features preserved. The Custom House dates back to about 1580, and is noteworthy by reason of its pole staircase, its granite windows, doorways, and frontage. Mr. Parker was successful in inducing the owner to spare these sixteenth-century relics in carrying out the reconstruction scheme.

## SOCIETIES AND INSTITUTIONS

*Associateship R.I.B.A. and Office Experience*

The attention of candidates for the R.I.B.A. Final Examination is called to the fact that no successful candidate will be admitted to candidature as Associate without having had at least one year's experience in an architect's office or in building work, and/or in a builder's office, or in gaining knowledge of the practical side of building.

## R.I.B.A. EXAMINATIONS

The Intermediate Examination, qualifying for election as Student R.I.B.A., was held in London from November 19 to 25, and in Manchester from November 19 to 24, 1926. Of the sixty-nine candidates examined, thirty-one passed and thirty-eight were relegated. The successful candidates are as follows, the names being given in order of merit as placed by the Examiners:—

Potter, John Edward.	Boreham, Cyril Ernest Walter.
Castle, James Thomas.	Clementson, John George.
Poltock, John Willey.	Dawney, Percy Wilfred.
Coleman, John James.	Farmer, Arthur Henry.
Farmer, Henry Collingwood.	Kinnimonth, William Hardie.
Pugh, Leslie.	Leicester, Osborne Howard.
Harrison, Edward James.	Morgan, John Loring.
Kennedy, Robert Terence.	Morris, Cyril Laurence.
Hodge, Denis Chapman.	Oakley, Edmund.
Hogarth, Horace Alwyn.	Roth, Daniel.
Helm, William Rex.	Shaw, Robert.
Marshall, Thomas Leslie.	Thomson, Thomas Finlayson.
Aylwin, John Norman.	Trouton, Anne Mabel Olivia.
Wakeham, Philip Oliver George.	Willis, Norman.
Thwaite, Thomas Edward Senior.	Wright, Wilfred George.
Bailey, Arthur.	

The Final Examination, qualifying for candidature as Associate R.I.B.A., was held in London from December 1 to 9, and in Edinburgh from December 1 to 8, 1926. Of the thirty-eight candidates examined (three of whom took Part I only) twenty-one passed (three in Part I only) and seventeen were relegated. The successful candidates are as follows:—

Bunce, Gerald Edgar.	Hobbs, Athol John.
Collins, Tom Anderson.	Hope, Arthur Fentern.
Craig, Archibald.	Jackman, Frank Leonard.
Evans-Vaughan, George Frederick.	Lancashire, John Edwin.
Ford, Walter Henry (Part I only).	Lindo, Harold Walter Eustace.
Gardner, Alfred Herbert.	Morley, Chester Stanley.
Goodall, Albert Edward James	Overnell, Harold.
(Part I only).	Savage, Herbert.
Goodin, Frederick Glanville.	Stedman, Leonard Rowland.
Graddon, Reuben Harold.	Ward, William Leslie (Part I only).
Guy, Roderick Nelson.	Watson, Frederick James.

The Special Examination, qualifying for candidature as Associate R.I.B.A., was held in London from December 1 to 7, 1926.



Of the twenty-two candidates examined (one of whom took Part I only) twelve passed (one in Part I only) and ten were relegated. The successful candidates are as follows:—

Black, John Alex.	Lodge, Arthur Frank.
Creese, John.	Lomax, Alan.
Edmunds, Edwyn Emrys.	Morant, Clive Aubrey Lushington
Fowler, Ernest Elias.	(Part I only).
Glass, Charles William.	Salisbury, John Eustace.
Harrison, John.	Taylor, Edgar Richard.
Kemp, Francis Henry Narbrook	
Crew.	

Examination in Professional Practice for Students of Schools of Architecture recognized for exemption from the Final Examination. The Examination was held in London on December 7 and 9, 1926. Twenty-five candidates were examined, all of whom passed. The successful candidates are as follows:—

Armitage, Harold Marshall	Hargroves, Amy Muriel.
Armitage.	Harper, Frederick Walter.
Banks, Arthur Vivian.	Jellicoe, Geoffrey Alan.
Barton, Harry Asten.	Johnson, Henry Arthur.
Brayshaw, Kathleen Orrey.	Monson, John William Sutton.
Cowley, Arthur David Richards.	Napolitano, Frederick.
Cummings, Robert Percy.	Short, Charles Matton.
Curtis, Wilfred Rupert Harper.	Silva, James Frederick Leopold de
Elder, Robert Walter.	*Sirotkin, Zwi.
Ellicott, Langford Pannell.	Sleigh, Alison.
Gray, Sylvia Charity.	Spencely, Hugh Greville Castle.
Greig, Jessie Marjorie.	Todd, Arthur Caton.
Grice, Richard Gerald.	Wride, James Barrington.

\* This candidate is not a British subject but has taken the examination for a certificate to that effect.

The Special Examination in Design for former Members and Candidates of the Society of Architects to qualify for the Associateship was held in London from December 1 to 6, 1926. Of the two candidates examined, one passed and one was relegated. The successful candidate is as follows:—Cannell, James.

#### R.I.B.A. Council Meeting

Following are notes from the minutes of the last meeting of the Council of the R.I.B.A.:

Architectural Education. On the recommendation of the Board of Architectural Education the Council decided that no student should be admitted to candidature for the Associateship without having had at least one year's office or equivalent practical experience.

Examinations. The following results were reported to the Council:

	Examined	Passed	Relegated
Final and Special, July 1926 ..	77 (6 Part I only) (3 Part II only)	51 (3 Part I only) (2 Part II only)	26
Professional Practice, July 1926 ..	37	33	4
Special Examination in Design for Society of Architects, Can- didates, etc., July 1926 .. ..	9	8	1
Intermediate, June 1926 .. ..	94	56	38
Town Planning, July 1926 ..	2	—	2
Statutory Examination, October 1926—			
(District Surveyor) .. ..	8	4	4
(Building Surveyor) .. ..	2	—	2

Recognized Schools. The R.I.B.A. Silver Medal for schools of architecture recognized for exemption from the Final Examination was awarded to J. Morrison, School of Architecture, Robert Gordon's Colleges, Aberdeen. The R.I.B.A. Bronze Medal (and £5 in books) for schools of architecture recognized for exemption from the R.I.B.A. intermediate examination was awarded to

Mr. E. B. O'Rorke, Architectural Association School of Architecture. The Council approved the reports of the R.I.B.A. Visiting Board on the following schools: The School of Architecture, Glasgow; the Cambridge University School of Architecture; the School of Architecture, Edinburgh; the School of Architecture, Aberdeen; the School of Architecture, Leeds.

R.I.B.A. Maintenance Scholarships. The Board of Architectural Education reported the award of R.I.B.A. maintenance scholarships as follows: Davies, E. L. W. (Colchester): £100 per annum for three years; Day, B. I. (Bideford): £100 per annum for three years; White, E. J. (Hull): £100 per annum for three years; Jackson, H. (Birmingham): £50 for the first year, £60 for the second year, £75 for the third year; Brown, A. K. (Sunderland): £50 for one year; Wylson, J. O. (Kent): £100 per annum for three years (Artists' General Benevolent Institution).

R.I.B.A. Prizes and Studentships. Tite Prize. The report of Mr. D. Beatty-Pownall, Tite prizeman 1925, was approved. Owen Jones Studentship. The report of Mr. E. Dinkel, Owen Jones student 1926, was approved. R.I.B.A. (Anderson and Webb) Scholarship at the Cambridge University School of Architecture. The award of the R.I.B.A. (Anderson and Webb) scholarship to Mr. J. T. Alliston was approved. R.I.B.A. (Archibald Dawney) Scholarships. The following awards were approved: I: Second Years of Scholarships. a: An R.I.B.A. (Archibald Dawney) scholarship of £75 for the year 1926-27 to R. P. Cummings (School of Architecture, Architectural Association); b: An R.I.B.A. (Archibald Dawney) scholarship of £50 for the year 1926-27 to W. R. Brinton (School of Architecture, Architectural Association). II: First Year of Scholarships. a: An R.I.B.A. (Archibald Dawney) scholarship of £75 for the year 1926-27 to C. W. Preston (School of Architecture, Architectural Association); b: An R.I.B.A. (Archibald Dawney) scholarship of £50 for the year 1926-27 to E. B. O'Rorke (School of Architecture, Architectural Association).

University of London Architectural Education Committee. Mr. Arthur Keen and Mr. Maurice E. Webb were re-nominated as representatives of the R.I.B.A. on the University of London Architectural Education Committee for the year 1927-28.

The Architects' Defence Union. The Council agreed to lend an additional sum of £100 to the Architects' Defence Union for organization expenses.

London Street Architecture Medal Jury. It was reported that the following additional appointments had been made to the jury: The Corporation of the City of London: Alderman Josiah Gunton, F.R.I.B.A.; the London County Council: Mr. William Hunt, J.P., vice-chairman of the L.C.C.; the Metropolitan Boroughs Standing Joint Committee: Alderman George A. Lansdown, F.R.I.B.A.

Membership. Applications for membership were approved as follows: Fellowship, 19 applications; Associateship, 8 applications; Hon. Associateship, 1 application; Hon. Corresponding membership, 3 applications.

The Smithson Drawings. On the recommendation of the Literature Standing Committee it was decided to purchase the Smithson drawings for the library and to call the collection "The Grissell Collection of Smithson Drawings."

Resignation. The following resignations were accepted: Mr. M. S. R. Adams (A.), Mr. T. S. Darbyshire (A.).

#### R.I.B.A. Registers

On the recommendation of the Board of Architectural Education the Council have established at the office of the R.I.B.A. two registers: 1: A register of advanced students of recognized schools; 2: A register of the names of architects willing to take such students. The intention is in this way to assist advanced students up to the stage of the completion of their qualifications for exemption from the Final Examination; one of the qualifications for exemption from the Final Examination being twelve months' experience in an office during the fourth and fifth years of the school course. The Council hope that general use will be made of the registers, and that as many architects as possible will place their names upon the register.



*Hampshire and Isle of Wight Architects*

The annual exhibition of architectural drawings in connection with the Hampshire and Isle of Wight Architectural Association, of which Mr. A. L. Roberts, the county architect, is the hon. secretary, was held at Newburgh House, Winchester. At the formal opening an interesting address was given by Major Harry Barnes, F.R.I.B.A., the vice-president of the R.I.B.A. Sir William Portal, Bart., the president of the Association, was in the chair. Major Barnes said people were beginning to see the necessity of placing restrictions on wretched buildings in beauty spots, they were waking up to the fact that this must be stopped. Their job as architects was to bring that home to the general public, and in that women could play an important part. That morning at the R.I.B.A. he had been taking part in an examination, and the best paper was written by a woman. After all, when they thought of what building was, it was only the second set of clothing they wore—it was only the outer dress or garment, and if they could get a tithe of the interest taken in buildings that was taken in dress, what an immense improvement there would be. And there was no reason why it should not be so, and every reason why it should be so. Why should they be so particular about what they wore and so regardless as to the houses they lived in? When they were dealing with dress they considered the back quite as important as the front, and that was the view they wished to obtain with regard to buildings. Among the functions which a society like that could perform, one of the most important was that of educating the public taste. Architects could push on with the knowledge that in their work they were not only serving their own interests, but also promoting the interests of the public. Mr. T. D. Atkinson proposed a hearty vote of thanks to Major Barnes for his illuminating address. Mr. A. L. Roberts, county architect and secretary of the Association, seconded.

In replying to the vote of thanks, Major Barnes said that they as architects realized how much the success of their profession depended on the support of laymen, and in Hampshire they were fortunate in having as their president such a distinguished layman as Sir William Portal.

*The Society for the Protection of Ancient Buildings*

During the summer of 1926 the Society began a systematic survey of the ancient bridges of England with the aim of making a complete record of those which still remain. Before the actual survey of any county was made a list was prepared of the bridges shown on large-scale eighteenth-century maps. This was done to avoid waste of time by visiting bridges constructed since the beginning of the nineteenth century. Fortunately, excellent inch-scale maps are in existence, made, in most cases, between the years 1750 and 1790, for a competition originated by the Royal Society. Although the scheme of searching eighteenth-century maps involves a considerable amount of work, it has led to the discovery of several ancient bridges in quite unexpected places, notably one, a mile west of Smarden, Kent. Up to the end of October, 1926, the Society point out in an interesting leaflet just issued, over 500 bridges were visited in the counties of Kent, Surrey, Sussex, South Wilts, Hants, Berks, South Devon, Dorset, and nearly 200 were measured and recorded. A considerable number of these were stone bridges built between 1750 and 1800—apparently a period of great bridge-building activity in the South of England. The bridges built before the year 1750 numbered seventy-six, of which fifteen were built with ribs, eight had semicircular and seven pointed arches, and the total number of bridges with pointed arches was thirty-four. The majority of these bridges were found to be in perfectly sound condition in spite of carrying heavy modern traffic, but in many cases the roadway is less than 12 ft. wide. It is estimated that £250 will be required to cover the bare expenses for investigating the southern half of England, and that it will take about eighteen months to complete. A further £450, as salary for the investigator over this period, is needed, making a total of £700. Subscriptions should be sent to the Secretary, Bridge Fund, the Society for the Protection of Ancient Buildings, 20 Buckingham Street, Adelphi, W.C.2. It is hoped that the public will subscribe generously and

enable this extremely important work to be completed. Should funds be available, the Society hopes to continue and to complete the survey of the South of England and the Midlands as far north as Derbyshire during 1927. Lists of bridges in the counties of Somerset, Oxford, Warwick, Derby, Shropshire, Stafford, Worcester, Gloucester, North Devon, and North Wilts have been prepared. The number of bridges shown on the eighteenth-century maps for these counties is over 900. Some of the bridges recorded during 1926 have already been scheduled under the Ancient Monuments Act, and application has been made to the Office of Works with regard to many of the remaining ones.

## AN ANTI-CORROSIVE ELECTRICAL SYSTEM

Although the system of cables and wiring in a building is substantially the same whether the electric current be obtained from a private plant or from a public supply, whether the current be continuous or alternating, and whether the pressure be 250 or 100 volts, special precautions are necessary where chemicals or moisture are prevalent. While the ordinary system might be eminently suitable for a cottage or even a country house, its installation in, say, a chemical or bleaching works, a laundry, or even a conservatory, would speedily result in difficulties due to corrosion. In the case of the copper wires, this takes the form of a bluish-green deposit known as verdigris, and the success of the installation can only be achieved by the elimination of all risk of corrosion by covering the copper in the wires and fittings so effectively that there is not the slightest danger of it coming in contact with the outside moisture. In chemically-charged atmospheres the insulating coverings of the wires and the fittings themselves have to be protected from the corrosive action of the acid-laden air, and in such circumstances protection may be afforded by means of an ebonite sheathing which covers the whole of the cables and accessories. Such a system has been designed by British Insulated Cables Ltd. of Helsby, but being of special application, is not yet as well known as it should be. The following notes on the system may, therefore, be of service: It is necessary that the ebonite-sheathed cable should be rigid and strong, and that it should be easy to handle by the workmen. The special properties of the material meet both these requirements. When placed in hot water the sheathing becomes pliable, so that it is a simple matter to straighten the cable and cut off any required length, or to bend it round corners during installation. In the case of the wires, these are insulated with pure vulcanized rubber, and sheathed in a tube of ebonite one half an inch in diameter, so that one size of gland is required to the junction boxes, switches, and other fittings. The ceiling roses are also ebonite-sheathed, and are fitted with an internal device for preventing the weight of the cable straining the joint. Two forms of lamp-holder may be used. One is of the ordinary bayonet type, and the other is an arrangement similar to the ceiling rose, with a device for taking the weight of the fitting, and fitted with a well glass. The distribution boxes and the switches, which are of the rotary snap type, are built up in a similar manner to the other fittings.

One of the most interesting installations is in the works of a firm of bleachers. Here the system feeds motors of 20-h.p. and over 100 lighting points, and it is still in good condition despite constant exposure to acids, alkalis, and both hot and cold chemically-charged liquids. The system has been tested with good results in buildings where corrosion has in the past reduced the life of metalwork generally and electric wiring in particular. It seems, therefore, to offer a ready means of overcoming all corrosive difficulties. Needless to say it complies with the rules of the I.E.E., the fire insurance companies, and electricity supply authorities.

The ebonite-sheathed system is obviously somewhat expensive to install owing to the elaborate nature of the fittings, but it should be well worth the consideration of architects who are responsible for the electrical equipment of industrial buildings, chemical laboratories, and other places where it is anticipated that operations will give rise to corrosive gases.

## COMPETITION CALENDAR

*The conditions of the following competitions have been received by the R.I.B.A.*

**January 15.** Designs for complete modern furniture for *a*, a double bedroom, *b*, a drawing-room, *c*, sitting hall, *d*, dining-room. Assessors, the Countess of Oxford and Asquith, the Lady Islington, Sir Frank Baines, C.V.O., C.B.E., F.R.I.B.A. (Director of H.M. Office of Works), Messrs. H. Clifford Smith, F.S.A. (Department of Woodwork, Victoria and Albert Museum), F. V. Burrage, O.B.E., R.E., A.R.C.A. (Principal of the Central School of Arts and Crafts), P. Morley Horder, F.S.A., Philip Tilden, Percy A. Wells (Principal of the Cabinet Department, Shoreditch Technical College), Holbrook Jackson (Editorial Director, The National Trade Press, Ltd.), and Captain Edward W. Gregory (Editor, *The Furnishing Trades' Organizer*). For the preliminary adjudication there are 200 guineas in prizes, and for the final, 300 guineas. Particulars from the Editor, *The Furnishing Trades' Organizer*, Regent House, Kingsway, London, W.C.2.

**January 25.** Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans. Sir John Burnet, R.A., British representative on jury of assessors.

**June 30.** Designs for the planning of the Civic Centre, Birmingham Assessor, Mr. H. V. Lanchester, F.R.I.B.A. Premium of £1,000 to the design placed first, and a further sum not exceeding £1,000 divided between the authors of other approved designs. Particulars from Mr. Herbert H. Humphries, M.INST.C.E., City Engineer and Surveyor. Deposit £1 1s., which will be returned after the receipt of a design or the return of the documents supplied.

**No date.** Incorporated Architects in Scotland: 1: Rowand Anderson Medal and £100; City Art Gallery and Museum; 2: Rutland Prize (£50) for Study of Materials and Construction; 3: Prize (£10 to £15) for 3rd-year Students in Scotland; 4: Maintenance Scholarship. £50 per annum for 3 years. Particulars from Secretary of the Incorporation, 15 Rutland Square, Edinburgh.

*The conditions of the following competition have not as yet been brought to the notice of the R.I.B.A.*

**No date.** Town Hall and Library, Leith. Assessor, Sir George Washington Browne, R.S.A. Particulars from the City Chambers, Edinburgh.

## COMPETITION NEWS

*The Scottish Legal Life Assurance Society's Competition*

The following architects have been placed on the short list for final competition in connection with the new buildings for the Scottish Legal Life Assurance Society: Allan and Friskin, 26 Castle Street, Dundee; Allan F. Duncan and Alex. Adam, 160 Hope Street, Glasgow; James B. Dunn, 14 Frederick Street, Edinburgh; A. McInnes Gardner, 202 Hope Street, Glasgow; Hutton and Taylor, 212 Bath Street, Glasgow; S. P. Silcock and Son, and S. E. Mahon, 6 Egypt Street, Warrington; Welch and Hollis, 7 New Square, Lincoln's Inn, London, W.C.; Wright and Wylie, 204 West Regent Street, Glasgow.

*League of Nations Competition, Geneva*

The following reply has been received by the R.I.B.A. from the Secretary-General of the League of Nations in regard to the closing date of the League of Nations competition: In reply to the letter of the R.I.B.A. on the subject of the architectural competition for the erection of the League of Nations' buildings at Geneva, the Secretary-General has the honour to state that the Council of the League of Nations, at its session of December, 1926, decided to maintain the dates fixed in the programme for the conclusion of the competition and the dispatch of plans by competitors. The competition accordingly remains open only until January 25, 1927, and plans must be dispatched in accordance with the dates given in the schedule of dates attached to the programme (Annex X).

*The "Daily Mail" Competition.*

The first and second premiated designs in the Daily Mail Ideal Houses Competition are illustrated in our Special Competition Supplement, which forms part of this issue.

## ARCHITECTURE ON THE WIRELESS

Following is a list of broadcast talks to be given by Professor C. H. Reilly: January 28: The Modern Problem—How to make an Architecture of our Time. February 4: The Office Block. February 11: The Church of To-day. February 18: The Small House of To-day. February 25: The Street of To-day. March 4: The Town of To-day—Some of London's Problems.

## TRADE NOTES

The staircases in Messrs. Selfridge's wholesale buildings, illustrated in our issue for December 15, were carried out by Messrs. Stuart's Granolithic Co., Ltd.

Messrs. Saunders and Taylor, Ltd., have moved their head office to new premises at Praed Road, Trafford Park, Manchester. Telephone: Trafford Park 670 or 671. The firm's London address is at 118-122 Holborn, E.C.1, as before.

An interesting device, known as the "Davy" fire escape, which has been in use for some time in America, has recently been introduced to the English market. It consists of a cylindrical drum about 10 in. in diameter and 3 in. in depth, through which runs a covered steel cable with slings attached. This fitting is screwed into the wall by the window, and in the event of fire anyone trapped on an upper floor, having fastened the sling under his armpits, throws the cable out of the window and steps over the sill. A centrifugal brake incorporated in the drum ensures a steady speed of descent whatever the weight of the person being lowered. At a recent demonstration, the escape was tested from a window 75 ft. high, from which several persons descended, the average time being about 30 seconds. Since a sling is fastened to each end of the cable, as soon as one person has reached the ground another can follow without the necessity of pulling up the cable. The device is neat and comparatively unobtrusive, and aims at the abolition of the external fire staircase. The sole agents for Europe are Messrs. John Kerr & Co., Little Peter Street, Manchester, from whom further particulars can be obtained on application.

## THE SPIRIT OF THE CENTURY

Following are the names of the contractors and some of the sub-contractors for the buildings illustrated on pages 103 to 110.

Workshop premises and proposed new showrooms and offices at Northampton for Messrs. Bell. General contractors, A. Glenn and Sons, Ltd. Sub-contractors: Burton Constructional Engineering Co., steel; Paragon Glazing Co., roof glazing; J. E. Lucas and Son, Ltd., sliding doors; A. Bell & Co., Ltd., faience, electrical work, plumbing work, sanitary fittings, dust extraction plant, and heating installation. Mr. W. J. Perkins acted as consulting engineer.

Holiday Home and Garden for Girls. General contractors, Lister-Mawby (Builders), Ltd. Sub-contractors: Thomas Lawrence and Sons, bricks; A. Bell & Co., Ltd., faience, Air Vent Heater Co., Ltd., central heating and hot water; Barrett and Wright, Ltd., electric lighting.

No. 16 Essex Street, W.C.2. General contractors, W. H. Gaze and Sons, Ltd. Sub-contractors: Barrett and Wright, Ltd., steelwork; Collier & Co., facing bricks; French Asphalte Co., asphalt; Air Vent Heater Co., Ltd., central heating and hot water; City Plumbing Co., Ltd., plumbing; Crittall Manufacturing Co., Ltd., steel windows; J. W. Singer and Sons, Ltd., metal work; A. Bell & Co., Ltd., faience; Smith, Major and Stevens, Ltd., S.M.S. electric passenger lift. Mr. John Lineham carved, coloured, and tinted the coat of arms over the centre window on the ground floor.

Montmead, Belmont, Surrey. Lister-Mawby, Ltd., foundation brickwork, joinery, and carpentry; A. Bell & Co., Ltd., faience; H. C. Tanner, marble work; Richmond Gas Stove Co., gas cookers and stoves; Air Vent Heater Co., Ltd., central heating and hot water; Barrett and Wright, Ltd., electric bells; W. H. Gaze and Sons, Ltd., entrance gate and posts and some walnut furniture; Jensen and Nicholson, paints and enamels. Mr. H. G. Roscoe acted as building superintendent, and Mr. G. Vine as foreman painter.

## THE WEEK'S BUILDING NEWS

*A School for Tilbury*

Another school is to be built at Tilbury.

*Extension of a Croydon Hospital*

A nurses' home is to be added to Croydon Mental Hospital.

*A Church for Tottenham*

A Roman Catholic church is to be built at West Green Road, Tottenham.

*Schools for Essex*

Sites have been bought for schools at Church Road, Harold Wood, Essex.

*Proposed Widening of Putney Bridge*

The London County Council is taking preliminary steps in connection with a scheme for widening Putney Bridge.

*Extension of Bethnal Green Hospital*

Land in Parmiter Street, E., is being acquired for the extension of Bethnal Green Hospital.

*Houses for Greenwich*

The Greenwich Council is to erect 102 houses at Charlton, S.E.

*Finsbury Housing Loan*

The Finsbury Council is to borrow £56,946 for erecting houses in Mantell Street, N.

*Housing at St. Albans*

St. Albans City Council is to erect forty-four houses on the Camp site. The cost is £18,984.

*More Houses for Coulsdon*

The Coulsdon Urban Council has authorized the preparation of a scheme for the erection of fifty additional houses.

*Demolition of the Empire Theatre*

The Empire Theatre, Leicester Square, is closing shortly for demolition, to enable a large cinema to seat 3,500 people to be built on its site.

*1,000 Houses for Southwell*

The Southwell Council is to ask the Ministry of Health for an extension of the housing subsidy and for sanction to erect another 1,000 houses.

*A Theatre for Manchester*

The cost of the Rialto Theatre, which is being erected at Higher Broughton, Manchester, has been estimated at £30,000. The scheme includes billiard hall and tea-rooms.

*Hull Housing Tender*

The Hull Corporation Housing Committee has accepted tenders for 558 more houses for the East Hull housing estate at a total cost of £228,749.

*350 Houses for Bradford*

The Bradford Corporation Estimates Sub-Committee has approved the erection by direct labour of 350 houses on the Shirley Manor estate at a cost of £177,000.

*Grangemouth Housing Scheme Approved*

The Scottish Board of Health has approved of a scheme, submitted by the Grangemouth Town Council, for the erection of fifty-two houses of two and three apartments.

*New Central School for Durham*

The Durham City Council has decided to provide a new central school for 720 pupils. The cost of the building is estimated at £18,000.

*Lincoln Cathedral Repair Fund*

The amount of the Lincoln Cathedral Repair Fund has now reached £68,796, including American money. The total required for repairs is £86,000.

*£116,000 Woolwich Baths Scheme*

Work has commenced on Woolwich Borough Council's new swimming pool, baths, and washhouses in Trafalgar Road, which are to cost over £116,000.

*Housing at Nottingham*

The Nottingham City Council has approved the widening of Windmill Lane, Sneinton, from its present width of 26 ft. to 50 ft. The lay-out of the site provides for the erection of 222 houses.

*Wenall Reservoir to be Completed*

The Cardiff Corporation Finance Committee has approved the expenditure of £40,000 for the immediate completion of the southern and northern half of the Wenall reservoir.

*Proposed Houses for Hoyland Nether*

It has been decided that application be made to the Ministry of Health for sanction to advertise for tenders for the erection of fifty houses at Hawshaw Lane, Hoyland Nether U.D.C.

*1,000 Houses for Sheffield*

The Coal Aston aerodrome site, near Sheffield, is to be retained for residential purposes, the Ministry of Health having given provisional sanction to a big development scheme, under which it is proposed to erect over 1,000 artisan houses.

*Additional Houses for Liverpool*

In view of the proposed reduction of the Government subsidy in October of this year, the borough surveyor of the Liverpool Council has been instructed to prepare plans and advertise for tenders for the erection of eighty additional houses on the Bewsey estate, and 100 additional on the Reynolds Street site.

*A New Theatre for the West End*

The money has been raised for a new theatre at the end of Denman Street, and opposite the Regent Palace Hotel. The new building will cost £120,000, occupy 1,700 sq. ft., and be ready probably in about six months.

*Approval of Wyke Houses*

The Bradford Corporation Sub-Committee has approved a recommendation of the Housing Committee for the erection of 350 houses on the Shirley Manor estate, Wyke, at an estimated cost, including streets, sewers, etc., of £177,000.

*Belfast Dwellings Loan*

A resolution has been approved by the Belfast City Council to apply to the Ministry of Home Affairs for Northern Ireland for sanction to a loan of £250,000 for the purpose of the Small Dwellings Acquisition Act.

*Proposed Fire Station for Sheffield*

The plans are now completed for the erection of the proposed new extended fire station on the site at Rockingham Street and Division Street, Sheffield, at an estimated cost of £30,000, exclusive of site and equipment.

*Housing at Falkirk*

The Falkirk Town Council has approved of a recommendation from the Housing Committee to proceed at once with the erection of 114 houses on ground acquired at Mill Flats, Bainsford.

*A School for Manchester*

The Manchester Corporation has purchased ten acres of land for the North Manchester Municipal School for Boys at Chain Bar Moston. The cost of the erection of the school, which is for 500 places, will be £60,000.

*Dewsbury Housing*

The Dewsbury Corporation has approved the erection of 118 houses, fifty-four on the Ravens Lodge site, and sixty-four on the Thornhill site, at a total cost, including construction of roads and sewers, of £57,000. Borrowing powers have already been received.

*Cardiff Town Planning*

At a meeting of the Cardiff Housing Committee the question of the town planning of the central area of the city was discussed at considerable length. The city engineer submitted a tentative plan of four new roads, which he agreed would require a great deal of amending, and it was eventually decided, after certain suggestions had been made, to adjourn consideration of the matter to a future meeting.



## RATES OF WAGES

				I	II					I	II					I	II		
				s. d.	s. d.					s. d.	s. d.					s. d.	s. d.		
A	ABERDARE	S. Wales & M.	1 8	1 3 1/2	A	E. Glamor-ganshire & Monmouthshire	S. Wales & M.	1 8	1 3 1/2	A	NANTWICH	N.W. Counties	1 6 1/2	1 2	A	Neath	S. Wales & M.	1 8	1 3 1/2
A	Abergavenny	S. Wales & M.	1 7 1/2	1 2 1/2	A	Exeter	S.W. Counties	1 7	1 2 1/2	A	Nelson	N.W. Counties	1 8	1 3 1/2	A	Newcastle	N.E. Coast	1 8	1 3 1/2
B	Abingdon	S. Counties	1 6	1 1 1/2	B	Exmouth	S.W. Counties	1 5	1 1	A	Newport	S. Wales & M.	1 8	1 3 1/2	A	Normanton	Yorkshire	1 8	1 3 1/2
A	Accrington	N.W. Counties	1 8	1 3 1/2	B	FELIXSTOWE	E. Counties	1 6	1 1 1/2	A	Northampton	Mid. Counties	1 7	1 2 1/2	A	North Shields	Mid. Counties	1 8	1 3 1/2
A	Addlestone	S. Counties	1 6 1/2	1 2	A	Filey	Yorks	1 6 1/2	1 2	B	North Shields	N.E. Coast	1 8	1 3 1/2	B	Norwich	E. Counties	1 6	1 1 1/2
A	Adlington	N.W. Counties	1 8	1 3 1/2	A	Fleetwood	N.W. Counties	1 8	1 3 1/2	A	Nottingham	Mid. Counties	1 8	1 3 1/2	A	Nuneaton	Mid. Counties	1 8	1 3 1/2
A	Aldrie	Scotland	1 8	1 3 1/2	B	Folkestone	S. Counties	1 4 1/2	1 0 1/2										
C	Aldeburgh	E. Counties	1 4	1 0 1/2	B	Frodsham	N.W. Counties	1 8	1 3 1/2										
A	Altrincham	N.W. Counties	1 8	1 3 1/2	B	Frome	S.W. Counties	1 4 1/2	1 0 1/2										
B	Appleby	N.W. Counties	1 4 1/2	1 0 1/2															
A	Ashton-under-Lyne	N.W. Counties	1 8	1 3 1/2															
A	Atherstone	Mid. Counties	1 6 1/2	1 2															
B	Aylesbury	S. Counties	1 4 1/2	1 0 1/2															
B	BANBURY	S. Counties	1 4 1/2	1 0 1/2	A	GATESHEAD	N.E. Coast	1 8	1 3 1/2	B	OAKHAM	Mid. Counties	1 5 1/2	1 1 1/2					
B	Bangor	N.W. Counties	1 5	1 1	B	Gillingham	S. Counties	1 5 1/2	1 1 1/2	A	Oldham	N.W. Counties	1 8	1 3 1/2					
A	Barnard Castle	N.E. Coast	1 8	1 3 1/2	B	Gloucester	S.W. Counties	1 6	1 1 1/2	A	Oswestry	Mid. Counties	1 6 1/2	1 2					
A	Barnsley	Yorkshire	1 8	1 3 1/2	A	Goole	Yorkshire	1 7	1 2 1/2	B	Oxford	S. Counties	1 6	1 1 1/2					
B	Barnstaple	S.W. Counties	1 5 1/2	1 1 1/2	A	Gosport	S. Counties	1 5 1/2	1 1 1/2										
A	Barrow	N.W. Counties	1 8	1 3 1/2	A	Grantham	Mid. Counties	1 6 1/2	1 2										
A	Barry	S. Wales & M.	1 8	1 3 1/2	A	Gravesend	S. Counties	1 7	1 2 1/2										
B	Basinstoke	S.W. Counties	1 4 1/2	1 0 1/2	A	Greenock	Scotland	1 8	1 3 1/2										
B	Bath	S.W. Counties	1 6	1 1 1/2	A	Grimsby	Yorkshire	1 8	1 3 1/2										
A	Batley	Yorkshire	1 8	1 3 1/2	B	Guildford	S. Counties	1 5 1/2	1 1 1/2										
B	Bedford	E. Counties	1 6	1 1 1/2	A	HALIFAX	Yorkshire	1 8	1 3 1/2										
A	Berwick-on-Tweed	N.E. Coast	1 7	1 2 1/2	A	Hanley	Mid. Counties	1 7 1/2	1 2 1/2										
A	Bewdley	Mid. Counties	1 6 1/2	1 2	A	Harrogate	N.E. Coast	1 8	1 3 1/2										
B	Bicester	Mid. Counties	1 4 1/2	1 0 1/2	B	Hartlepool	N.E. Coast	1 8	1 3 1/2										
A	Birkenhead	N.W. Counties	1 9	1 3 1/2	B	Harwich	E. Counties	1 5	1 1										
A	Birmingham	Mid. Counties	1 8	1 3 1/2	B	Hastings	S. Counties	1 4 1/2	1 0 1/2										
A	Bishop Auckland	N.E. Coast	1 8	1 3 1/2	B	Hatfield	S. Counties	1 5 1/2	1 1 1/2										
A	Blackburn	N.W. Counties	1 8	1 3 1/2	B	Hereford	S. W. Counties	1 6	1 1 1/2										
A	Blackpool	N.W. Counties	1 8	1 3 1/2	B	Hertford	E. Counties	1 5 1/2	1 1 1/2										
A	Blyth	N.E. Coast	1 8	1 3 1/2	A	Heysham	N.W. Counties	1 7 1/2	1 2 1/2										
B	Bognor	S. Counties	1 4 1/2	1 0 1/2	A	Howden	N.E. Coast	1 8	1 3 1/2										
A	Bolton	N.W. Counties	1 8	1 3 1/2	A	Huddersfield	Yorkshire	1 8	1 3 1/2										
A	Boston	Mid. Counties	1 6 1/2	1 2	A	Hull	Yorkshire	1 8	1 3 1/2										
B	Bournemouth	S. Counties	1 6	1 1 1/2															
A	Bradford	Yorkshire	1 8	1 3 1/2															
A	Brentwood	E. Counties	1 6 1/2	1 2															
A	Bridgend	S. Wales & M.	1 8	1 3 1/2															
B	Bridgewater	S.W. Counties	1 5 1/2	1 1 1/2															
A	Bridlington	Yorkshire	1 7 1/2	1 2 1/2															
A	Brighouse	Yorkshire	1 8	1 3 1/2															
B	Brighton	S. Counties	1 6	1 1 1/2															
A	Bristol	S.W. Counties	1 8	1 3 1/2															
B	Brixham	S.W. Counties	1 4 1/2	1 0 1/2															
A	Bromsgrove	Mid. Counties	1 6 1/2	1 2															
C	Bromyard	Mid. Counties	1 4 1/2	1 0 1/2															
A	Burnley	N.W. Counties	1 8	1 3 1/2															
A	Burslem	Mid. Counties	1 8	1 3 1/2															
A	Burton-on-Trent	Mid. Counties	1 7	1 2 1/2															
A	Bury	N.W. Counties	1 8	1 3 1/2															
A	Buxton	N.W. Counties	1 6 1/2	1 2															
B	CAMBRIDGE	E. Counties	1 6	1 1 1/2	A	ILKLEY	Yorkshire	1 8	1 3 1/2										
B	Canterbury	S. Counties	1 4 1/2	1 0 1/2	A	Immingham	Mid. Counties	1 8	1 3 1/2										
A	Cardiff	S. Wales & M.	1 8	1 3 1/2	B	Ipswich	E. Counties	1 6	1 1 1/2										
A	Carlisle	N.W. Counties	1 8	1 3 1/2	C	Isle of Wight	S. Counties	1 4	1 0 1/2										
B	Carmarthen	S. Wales & M.	1 6	1 1 1/2															
B	Carnarvon	N.W. Counties	1 5	1 1	A	JARROW	N.E. Coast	1 8	1 3 1/2										
A	Carnforth	N.W. Counties	1 7 1/2	1 2 1/2															
A	Castleford	Yorkshire	1 8	1 3 1/2	A	KEIGHLEY	Yorkshire	1 8	1 3 1/2										
B	Chatham	S. Counties	1 5 1/2	1 1 1/2	B	Kendal	N.W. Counties	1 5	1 1										
B	Chelmsford	E. Counties	1 5 1/2	1 1 1/2	B	Kewick	N.W. Counties	1 5	1 1										
B	Cheltenham	S.W. Counties	1 6	1 1 1/2	B	Kettering	Mid. Counties	1 6	1 1 1/2										
A	Chester	N.W. Counties	1 8	1 3 1/2	A	Kidderminster	Mid. Counties	1 6 1/2	1 2										
A	Chesterfield	Mid. Counties	1 8	1 3 1/2	B	King's Lynn	E. Counties	1 5	1 1										
B	Chichester	S. Counties	1 4 1/2	1 0 1/2															
A	Chorley	N.W. Counties	1 8	1 3 1/2	A	LANCASTER	N.W. Counties	1 7 1/2	1 2										
B	Claremont	S. Counties	1 5 1/2	1 1 1/2	A	Leamington	Mid. Counties	1 6 1/2	1 2 1/2										
A	Clitheroe	N.W. Counties	1 8	1 3 1/2	A	Leeds	Yorkshire	1 8	1 3 1/2										
A	Clydebank	Scotland	1 8	1 3 1/2	A	Leek	Mid. Counties	1 8	1 3 1/2										
A	Coalville	Mid. Counties	1 8	1 3 1/2	A	Leicester	Mid. Counties	1 8	1 3 1/2										
B	Colchester	E. Counties	1 5 1/2	1 1 1/2	A	Leigh	N.W. Counties	1 8	1 3 1/2										
A	Colne	N.W. Counties	1 8	1 3 1/2	B	Lewes	S. Counties	1 4 1/2	1 0 1/2										
B	Colwyn Bay	N.W. Counties	1 5 1/2	1 1 1/2	A	Lichfield	Mid. Counties	1 6 1/2	1 2										
A	Consett	N.E. Coast	1 8	1 3 1/2	A	Lincoln	Mid. Counties	1 8	1 3 1/2										
B	Conway	N.W. Counties	1 5 1/2	1 1 1/2	A	Liverpool	N.W. Counties	1 10	1 4 1/2										
A	Coventry	Mid. Counties	1 8	1 3 1/2	B	Llandudno	N.W. Counties	1 6	1 1 1/2										
A	Crowe	N.W. Counties	1 6 1/2	1 2	A	Llanelli	S. Wales & M.	1 8	1 3 1/2										
A	Cumberland	.....	1 6 1/2	1 2	A	London (12 miles radius)	.....	1 9	1 4										
A	DARLINGTON	N.E. Coast	1 8	1 3 1/2	A	Long-Eaton	Mid. Counties	1 8	1 3 1/2										
A	Darwen	N.W. Counties	1 8	1 3 1/2	A	Loughborough	Mid. Counties	1 8	1 3 1/2										
B	Deal	S. Counties	1 4 1/2	1 0 1/2	B	Luton	E. Counties	1 6	1 1 1/2										
B	Denbigh	N.W. Counties	1 5 1/2	1 1 1/2	A	Lytham	N.W. Counties	1 8	1 3 1/2										
A	Derby	Mid. Counties	1 8	1 3 1/2															
A	Dewsbury	Yorkshire	1 8	1 3 1/2	A	MACCLESFIELD	N.W. Counties	1 7 1/2	1 2 1/2										
A	Didsbury	S. Counties	1 6 1/2	1 2	B	Maidstone	S. Counties	1 5 1/2	1 1 1/2										
C	Doncaster	Yorkshire	1 8	1 3 1/2	A	Malvern	Mid. Counties	1 6 1/2	1 2										
A	Dorchester	S.W. Counties	1 4	1 0 1/2	A	Manchester	N.W. Counties	1 8	1 3 1/2										
A	Driffield	Yorks	1 6 1/2	1 2	A	Mansfield	Mid. Counties	1 8	1 3 1/2										
A	Droitwich	Mid. Counties	1 6 1/2	1 2	B	Margate	S. Counties	1 4 1/2	1 0 1/2										
A	Dudley	Mid. Counties	1 7	1 2 1/2	A	Matlock	Mid. Counties	1 6 1/2	1 2										
A	Dundee	Scotland	1 8	1 3 1/2	A	Merthyr	S. Wales & M.	1 8	1 3 1/2										
A	Durham	N.E. Coast	1 8	1 3 1/2	A	Middlesbrough	N.E. Coast	1 8	1 3 1/2										
B	EAST-BOROUGH	S. Counties	1 6	1 1 1/2	A	Middlewich	N.W. Counties	1 6 1/2	1 2										
A	Ebbw Vale	S. Wales & M.	1 8	1 3 1/2	A	Monmouth	S. Wales & M.	1 8	1 3 1/2										
A	Edinburgh	Scotland	1 8	1 3 1/2	A	Morecambe	S. and E. Glamorganshire	.....	.....										
B	YARMOUTH	E. Counties	1 5 1/2	1 1 1/2	A	Morecambe	N.W. Counties	1 7 1/2	1 2 1/2										
B	Yeovil	S.W. Counties	1 5	1 1															
A	York	Yorkshire	1 8	1 3 1/2															



## PRICES CURRENT

## EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4½d. per hour; LABOURER, 1s. 4½d. per hour; NAVY, 1s. 4½d. per hour; TIMBERMAN, 1s. 6d. per hour; SCAFFOLDER, 1s. 5½d. per hour; WATCHMAN, 7s. 6d. per shift.

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 13 0
Put gravel, per yd.	0 18 0
Put sand, per yd.	0 14 6
Washed sand	0 15 6
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 19 0
Lias lime, per ton	2 10 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	
Transport hire per day:	
Cart and horse	£1 3 0
Trailer	£0 15 0
3-ton motor lorry	3 15 0
Steam roller	4 5 0
Steam lorry, 5-ton	4 0 0
Water cart	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube. 0 3 0  
Exceeding 6 ft., but under 12 ft., add 30 per cent.

In stiff clay, add 30 per cent.  
In underpinning, add 100 per cent.  
In rock, including blasting, add 225 per cent.  
If basketed out, add 80 per cent. to 150 per cent.

Headings, including timbering, add 400 per cent.

RETURNS, fill, and ram, ordinary earth, per yd. £0 2 4

SPREAD and level, including wheeling, per yd. 0 2 4

PLANKING, per ft. sup. 0 0 5  
do. over 10 ft. deep, add for each 5 ft. depth 30 per cent.

HARDWARE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. £0 2 1

do. 6 in. thick, per yd. sup. 0 2 10

PUDDLING, per yd. cube 1 10 0

CEMENT CONCRETE, 4-2-1, per yd. cube 2 3 0

do. 6-2-1, per yd. cube 1 18 0

do. in upper floors, add 15 per cent.

do. in reinforced-concrete work, add 20 per cent.

do. in underpinning, add 60 per cent.

LIAS LIME CONCRETE, per yd. cube £1 16 0

BREEZE CONCRETE, per yd. cube 1 7 0

do. in lintels, etc., per ft. cube 0 1 6

## DRAINER

LABOURER, 1s. 4½d. per hour; TIMBERMAN, 1s. 6d. per hour; BRICKLAYER, 1s. 9½d. per hour; PLUMBER, 1s. 9½d. per hour; WATCHMAN, 7s. 6d. per shift.

Stoneware pipes, tested quality, 4 in., per yd.	£0 1 3
do. 6 in., per yd.	0 2 8
do. 9 in., per yd.	0 3 6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 6 9
do. 6 in., per yd.	0 9 2
Portland cement and sand, see "Excavator" above.	
Lead for caulking, per cwt.	£2 5 6
Gaskin, per lb.	0 0 5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3

do. 6 in., per ft. 0 5 0

do. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 9 0

do. 6 in., per ft. 0 11 0

Note.—These prices include digging and filling for normal depths, and are average prices.

Fittings in Stoneware and Iron according to type. See Trade Lists.

## BRICKLAYER

BRICKLAYER, 1s. 9½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER 1s. 5½d. per hour.

London stocks, per M.	£4 15 0
Flettons, per M.	2 18 0
Staffordshire blue, per M.	9 10 0
Firebricks, 2½ in., per M.	11 3 0
Glazed salt, white, and ivory stretchers, per M.	23 0 0
do. headers, per M.	23 10 0

Colours, extra, per M.	£5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 17 0
Mixed lime mortar, per yd.	1 6 0
Damp course, in rolls of 4½ in., per roll	0 2 6
do. 9 in., per roll	0 4 9
do. 14 in., per roll	0 7 6
do. 18 in., per roll	0 9 6

BRICKWORK in stone lime mortar.	
Flettons or equal, per rod	33 0 0
do. in cement do., per rod	36 0 0
do. in stocks, add 25 per cent. per rod.	
do. in blues, add 100 per cent. per rod.	
do. circular on plan, add 12½ per cent. per rod.	
FACINGS, FAIR, per ft. sup. extra	£0 0 2
do. Red Rubbers, gauged and set in putty, per ft. extra	0 4 6
do. salt, white or ivory glazed, per ft. sup. extra	0 5 6
TUCK POINTING, per ft. sup. extra	0 0 10
WEATHER POINTING, per ft. sup. extra	0 0 3
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
do. 1½ in., per yd. sup.	0 6 0
do. 2 in., per yd. sup.	0 7 0

BITUMINOUS DAMP COURSE, ex rolls, per ft. sup. 0 0 7

ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup. 0 8 0

do. vertical, per yd. sup. 0 11 0

SLATE DAMP COURSE, per ft. sup. 0 0 10

ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd. 0 8 6

do. SKIRTING, 6 in. 0 0 11

BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup. 0 5 3

do. do. 3 in. 0 6 6

THE wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

## MASON

MASON, 1s. 9½d. per hour; DO. fixer, 1s. 10½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER, 1s. 5½d. per hour.

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Bashed, per ft. cube	0 4 7
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. sup.	0 6 6
York templates saven, per ft. cube	0 6 9
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube £0 2 2

do. for every 10 ft. above 30 ft., add 15 per cent.

PLAIN face Portland basis, per ft. sup. £0 2 8

do. circular, per ft. sup. 0 4 0

SUNK FACE, per ft. sup. 0 3 9

do. circular, per ft. sup. 0 4 10

JOINTS, arch, per ft. sup. 0 2 6

do. sunk, per ft. sup. 0 2 7

do. do. circular, per ft. sup. 0 4 6

CIRCULAR-CIRCULAR work, per ft. sup. 1 2 0

PLAIN MOULDING, straight, per inch of girth, per ft. run 0 1 1

do. circular, do. per ft. run 0 1 4

HALF SAWING, per ft. sup.	£0 1 0
Add to the foregoing prices if in York stone 35 per cent.	
do. Mansfield, 12½ per cent.	
Deduct for Bath, 33½ per cent.	
do. for Chilmark, 5 per cent.	
SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 9 0
YORK SILLS, W. & T., ft. cub. fixed	1 13 0

## SLATER AND TILER

SLATER, 1s. 9½d. per hour; TILER, 1s. 9½d. per hour; SCAFFOLDER, 1s. 5½d. per hour; LABOURER, 1s. 4½d. per hour.

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per M:	
Portmadoc Ladies	£14 0 0
Countess	27 0 0
Duchess	32 0 0
Clips, lead, per lb.	0 0 4
Clips, copper, per lb.	0 0 2
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 1 10
Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
do. Peggies, per ton	7 5 0

SLATING, 3 in. gauge, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0

WESTMORLAND, in diminishing courses, per square 6 5 0

CORNISH DO., per square 6 3 0

Add, if vertical, per square approx. 0 13 0

Add, if with copper nails, per square approx. 0 2 6

Double course at eaves, per ft. approx. 0 1 0

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square 5 6 0

do., machine-made do., per square 4 17 0

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen £0 0 10

STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square 0 10 0

LABOUR only in laying slates, but including nails, per square 1 0 0

See "Sundries for Asbestos Tiling."

## CARPENTER AND JOINER

CARPENTER, 1s. 9½d. per hour; JOINER, 1s. 9½d. per hour; LABOURER, 1s. 4½d. per hour.

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7×3, per std.	£20 0 0
11×4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 5 0
do. T. and G., 1 in., per sq.	1 5 0
Planed Boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 2 0
Mahogany, per ft. sup. of 1 in.	0 2 0
do. Cuba, per ft. sup. of 1 in.	0 3 0
Teak, per ft. sup. of 1 in.	0 3 0
do., ft. cube	0 15 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube 0 5 9

do. framed in floors, roofs, etc., per ft. cube 0 6 3

do., framed in trusses, etc., including ironwork, per ft. cube 0 7 3

PITCH PINE, add 33½ per cent.

FIXING only boarding in floors, roofs, etc., per sq. 0 13 6

SARKING FELT laid, 1-ply, per yd. 0 1 6

do., 3-ply, per yd. 0 1 9

CENTERING for concrete, etc., including horsing and striking, per sq. 3 10 0

SLATE BATTENING, per sq. 0 18 6

## PRICES CURRENT; continued.

## CARPENTER AND JOINER: continued.

DEAL GUTTER BOARD, 1 in., on firing, per sq.	£3 5 0
MOULDED CASEMENTS, 1½ in., in 4 sqs., glazing beads and hung, per ft. sup.	0 3 0
DO., DO. 2 in., per ft. sup.	0 3 3
DEAL cased frames, oak sills, 2 in. d.h. sashes, brass-faced pulleys, etc., per ft. sup.	0 4 0
DOORS, 4 pan. sq. b.s., 2 in., per ft. sup.	0 3 6
DO., DO., DO. 1½ in., per ft. sup.	0 3 0
DO., DO. moulded b.s., 2 in., per ft. sup.	0 3 9
DO., DO., DO. 1½ in., per ft. sup.	0 3 3
If in oak multiply 3 times.	
If in mahogany multiply 3 times.	
If in teak multiply 3 times.	
WOOD BLOCK FLOORING, standard blocks, laid in mastic herringbone:	
Deal, 1 in., per yd. sup., average	0 10 0
DO. 1½ in., per yd. sup., average	0 12 0
DO., DO. 1½ in. maple blocks	0 15 0
STAIRCASE WORK, DEAL:	
1 in. riser, 1½ in. tread, fixed, per ft. sup.	0 3 6
2 in. deal strings, fixed, per ft. sup.	0 3 9

## PLUMBER

PLUMBER, 1s. 9½d. per hour; MATE OR LABOURER, 1s. 4½d. per hour.

Lead, milled sheet, per cwt.	£2 4 6
DO. drawn pipes, per cwt.	2 6 0
DO. soil pipe, per cwt.	2 8 0
DO. scrap, per cwt.	1 9 6
Copper, sheet, per lb.	0 1 0
Solder, plumber's, per lb.	0 1 2
DO. fine, per lb.	0 1 5
Cast-iron pipes, etc.:	
L.C.C. soil, 3 in., per yd.	0 4 1
DO. 4 in., per yd.	0 5 0
R.W.P., 2½ in., per yd.	0 2 0
DO. 3 in., per yd.	0 2 5
DO. 4 in., per yd.	0 3 3
Gutter, 4 in. H.R., per yd.	0 1 5
DO. 4 in. O.G., per yd.	0 1 9

MILLED LEAD and labour in gutters, flashings, etc.

LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0 2 1
DO. ¾ in., per ft.	0 2 5
DO. 1 in., per ft.	0 3 3
DO. 1½ in., per ft.	0 4 6

LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.

DO. 3 in., per ft.	0 6 0
DO. 4 in., per ft.	0 7 0
DO. 4 in., per ft.	0 9 9

CAST-IRON R.W. PIPE, at 24 lb. per length, jointed in red lead, 2½ in., per ft.

DO. 3 in., per ft.	0 2 5
DO. 4 in., per ft.	0 2 10
DO. 4 in., per ft.	0 3 3

CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.

DO. O.G., 4 in., per ft.	0 2 7
DO. O.G., 4 in., per ft.	0 2 10

CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.

DO. 3 in., per ft.	0 7 0
DO. 3 in., per ft.	0 6 0

Fixing only:

W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each

BATHS only, with all joints	2 5 0
LAVATORY BASINS only, with all joints, on brackets, each	1 18 0

## PLASTERER

PLASTERER, 1s. 9½d. per hour (plus allowances in London only); LABOURER, 1s. 4½d. per hour.

Chalk lime, per ton	£2 17 0
Hair, per cwt.	0 18 0
Sand and cement see "Excavator," etc., above.	
Lime putty, per cwt.	£0 2 9
Hair mortar, per yd.	1 7 0
Fine stuff, per yd.	1 14 0
Sawn laths, per bd.	0 2 9
Keene's cement, per ton	5 15 0
Strapite, per ton	3 10 0
DO. fine, per ton	3 18 0
Plaster, per ton	3 0 0
DO. per ton	3 12 6
DO. fine per ton	5 12 0

Thistle plaster, per ton	£3 9 0
Lath nails, per lb.	0 0 4
LATHING with sawn laths, per yd.	0 1 7
METAL LATHING, per yd.	0 2 3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0 2 4
DO. vertical, per yd.	0 2 7
RENDER, on brickwork, 1 to 3, per yd.	0 2 7
RENDER in Portland and set in fine stuff, per yd.	0 3 3
RENDER, float, and set, trowelled, per yd.	0 2 9
RENDER and set in Sirapite, per yd.	0 2 5
DO. in Thistle plaster, per yd.	0 2 5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0 0 5
EXTRA, if on ceilings, per yd.	0 0 5
ANGLES, rounded Keene's on Portland, per ft. lin.	0 0 6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0 0 5
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1 11 6
FIBROUS PLASTER SLABS, per yd.	0 1 10

## GLAZIER

GLAZIER, 1s. 8½d. per hour.

Glass: 4ths in crates:	
Clear, 21 oz.	£0 0 6
DO. 26 oz.	0 0 7½
Cathedral white, per ft.	0 0 6½
Polished plate, British ¼ in., up to 2 ft. sup.	0 2 0
DO. 3 ft. sup.	0 2 6
DO. 7 ft. sup.	0 3 6
DO. 25 ft. sup.	0 4 0
DO. 100 ft. sup.	0 4 6
Rough plate, ½ in.	0 0 6
DO. ¼ in., per ft.	0 0 6½
Linseed oil putty, per cwt.	0 16 0

GLAZING in putty, clear sheet, 21 oz.	£0 0 11
DO. 26 oz.	0 0 1 0
GLAZING in beads, 21 oz., per ft.	0 1 1
DO. 26 oz., per ft.	0 1 4
Small sizes slightly less (under 3 ft. sup.).	
Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.	
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0 3 6
Glazing only, polished plate, 6½d. to 8d. per ft. according to size.	

## DECORATOR

PAINTER, 1s. 8½d. per hour; LABOURER, 1s. 4½d. per hour; FRENCH POLISHER, 1s. 9d. per hour; PAPERHANGER, 1s. 8½d. per hour.

Genuine white lead, per cwt.	£3 11 0
Linseed oil, raw, per gall.	0 3 7
DO., boiled, per gall.	0 3 10
Turpentine, per gall.	0 6 2
Liquid driers, per gall.	0 9 6
Knotting, per gall.	1 4 0
Distemper, washable, in ordinary colours, per cwt., and up	2 0 0
Double size, per firkin	0 3 6
Pumice stone, per lb.	0 0 4
Single gold leaf (transferable), per book	0 1 11
Varnish, copal, per gall. and up	0 18 0
DO., flat, per gall.	1 2 0
DO., paper, per gall.	1 0 0
French polish, per gall.	0 19 0
Ready mixed paints, per gall. and up	0 10 6

LIME WHITING, per yd. sup.	0 0 3
WASH, stop, and whiten, per yd. sup.	0 0 6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0 0 9
KNOT, stop, and prime, per yd. sup.	0 0 7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0 0 10
DO., subsequent coats, per yd. sup.	0 0 9
DO., enamel coat, per yd. sup.	0 1 2½
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0 3 8

FIGURED DO., DO., per yd. sup.	£0 5 6
FRENCH POLISHING, per ft. sup.	0 1 2
STRIPPING old paper and preparing, per piece	0 1 7
HANGING PAPER, ordinary, per piece	0 1 10
DO., fine, per piece, and upwards	0 2 4
VARNISHING PAPER, 1 coat, per piece	0 9 0
CANVAS, strained and fixed, per yd. sup.	0 3
VARNISHING, hard oak, 1st coat, per yd. sup.	0 1 2
DO., each subsequent coat, per yd. sup.	0 0 11

## SMITH

SMITH, weekly rate equals 1s. 9½d. per hour; MATE, do. 1s. 4d. per hour; ERECTOR, 1s. 9½d. per hour; FITTER, 1s. 9½d. per hour; LABOURER 1s. 4d. per hour.

Mild steel in British standard sections, per ton	£12 10 0
Sheet steel:	
Flat sheets, black, per ton	19 0 0
DO., galv., per ton	23 0 0
Corrugated sheets, galv., per ton	23 0 0
Driving screws, galv., per grs.	0 1 10
Washers, galv., per grs.	0 1 1
Bolts and nuts, per cwt. and up	1 18 0

MILD STEEL in trusses, etc., erected, per ton	25 10 0
DO. in small sections as reinforcement, per ton	16 10 0
DO. in compounds, per ton	17 0 0
DO. in bar or rod reinforcement, per ton	20 0 0
WROUGHT IRON in chimney bars, etc., including building in, per cwt.	2 0 0
DO. in light railings and balusters, per cwt.	2 5 0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0 2 0

## SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.

	£0 0 2½
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FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup.

DO. . . . . from 3d. to	0 0 6
Plaster board, per yd. sup. . . . . from	0 1 7

PLASTER BOARD, fixed as last, per yd. sup.

DO. . . . . from	0 2 8
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Asbestos sheeting, ½ in., grey flat, per yd. sup.

DO. corrugated, per yd. sup.	0 2 3
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ASBESTOS SHEETING, fixed as last, flat, per yd. sup.

DO. corrugated, per yd. sup.	0 3 3
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ASBESTOS SLATING or tiling on, but not including battens, or boards, plain "diamond" per square, grey

DO., red	2 15 0
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Asbestos cement slates or tiles, ½ in. punched per M., grey

DO. red	3 0 0
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ASBESTOS COMPOSITION FLOORING:

Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.

DO. ½ in. thick, suitable for domestic work, unpainted, per yd.	0 7 0
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Metal casements for wood frames, domestic sizes, per ft. sup.

DO. in metal frames, per ft. sup.	0 1 6
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HANGING only metal casement in, but not including wood frames, each

per ft. sup.	0 2 10
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BUILDING in metal casement frames, per ft. sup.

	0 0 7
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Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

Plywood:

3 m/m alder, per ft. sup.

4½ m/m amer. white, per ft. sup.	0 0 2
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½ m/m figured ash, per ft. sup.

4½ m/m 3rd quality, composite birch, per ft. sup.	0 0 3½
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	0 0 5
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	0 0 1½
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